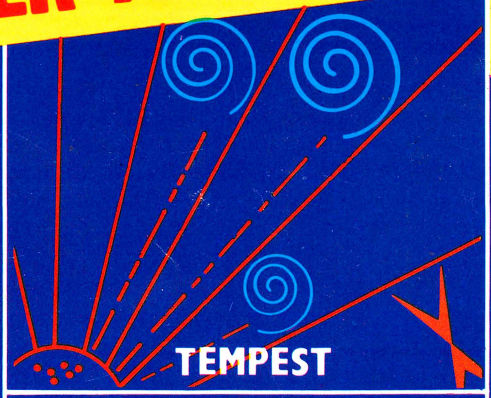
BY THE EDITORS OF
CONSUMER GUIDE®

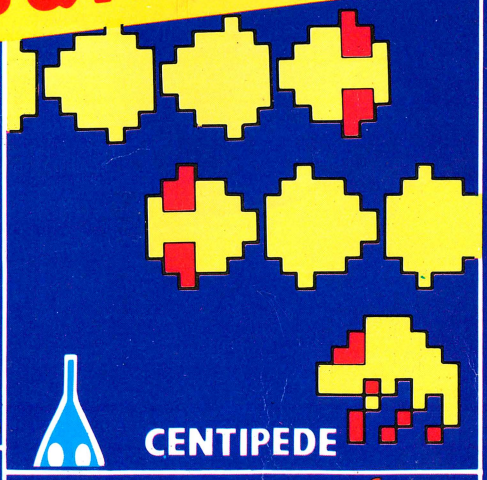
HOW TO WIN AT VIDEO GAMES

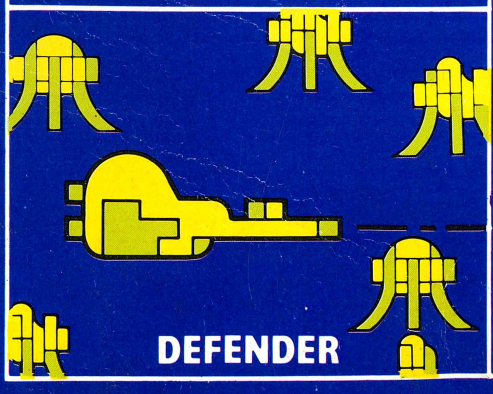
FEATURING THE LATEST VIDEO GAME STRATEGIES & TIPS

DONKEY KONG · PAC-MAN · QIX · TEMPEST
CENTIPEDE · OMEGA RACE · PHOENIX
DEFENDER · ASTEROIDS & MORE !

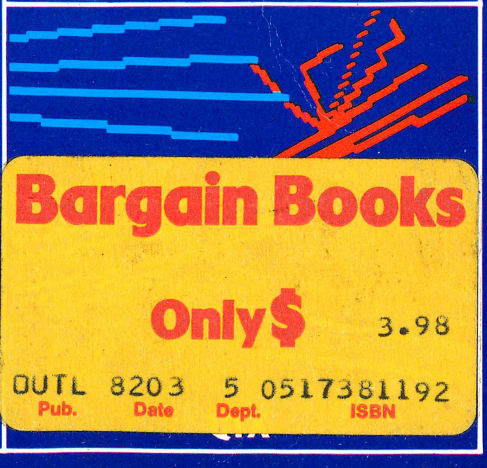
PAC-MAN


TEMPEST


CENTIPEDE


DEFENDER

DONKEY KONG



Bargain Books
Only$ 3.98
OUTL 8203 5 0517381192
Pub. Date Dept. ISBN

BY THE EDITORS OF
CONSUMER GUIDE®

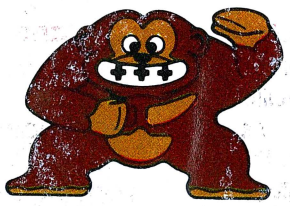
BEEKMAN HOUSE
New York

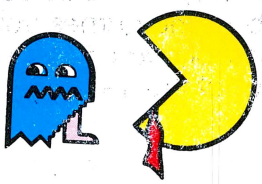
Contents

Introduction 3

Nine Top Video Games

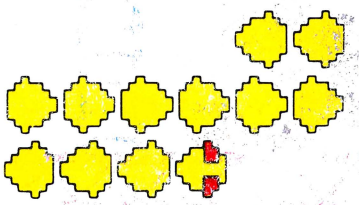
Asteroids 5
Centipede 9
Defender 15
Donkey Kong 21
Omega Race 29
Pac-Man 35
Phoenix 41
Qix 47
Tempest 53





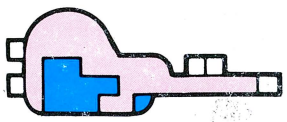
Four Top Contenders

Frogger 59
Missile Command 60
Ms. Pac-Man 61
Turbo 62



Appendix

Up-and-Coming Games 63
Home Systems 64



Copyright © 1982 by Publications International, Ltd. All rights reserved. This book may not be reproduced or quoted in whole or in part by mimeograph or any other printed means or for presentation on radio or television without written permission from:

Louis Weber, President
Publications International, Ltd.
3841 West Oakton Street
Skokie, Illinois 60076
Permission is never granted for commercial purposes.

CONSUMER GUIDE® and PUBLICATIONS INTERNATIONAL, LTD. have no affiliation or contractual agreement with any manufacturer of video games, including the games described in this book.

Library of Congress Catalog Card Number: 82-80960
ISBN: 0-517-381192

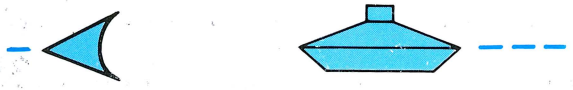
This edition published by:
Beekman House
Distributed by Crown Publishers, Inc.
One Park Avenue
New York, New York 10016

Cover Design: Frank Peiler
Illustrations: Clarence A. Moberg
Special thanks to Dennis' Place for Games: Clark Street, Chicago, Illinois.

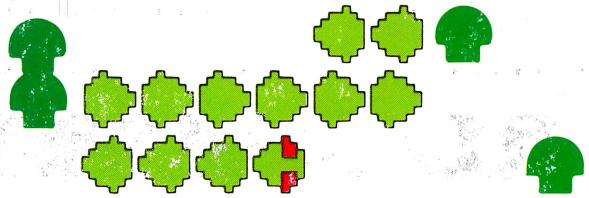
Manufactured in the United States of America
10 9 8 7 6 5 4 3 2 1

Introduction

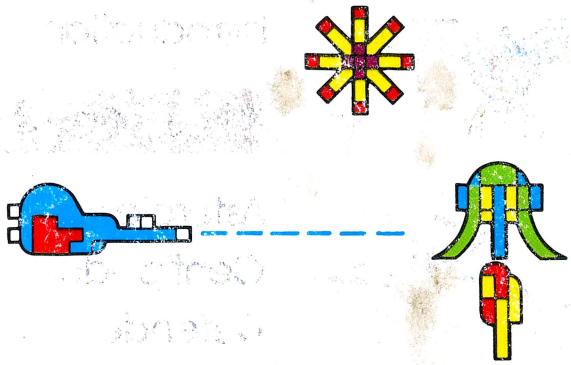
We've been doing a lot of talking. We've been talking face-to-face with video experts from New York, Chicago, Austin, and San Jose. We've been making long-distance phone calls, lots of them, to video manufacturers and tournament champions. And we've been hitting the arcades—every day—playing the games and talking non-stop to owners and players and spectators. There's a lot of information out there, folks. And you're holding the very best of that information right now in your hands.



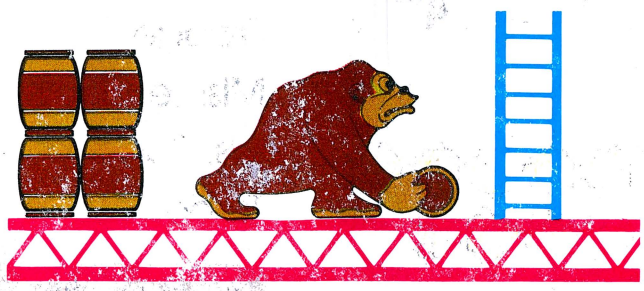
This is a magical book. For the first time in the history of video games, you'll be witness to the top-secret strategies of the best video-gamesters. We were flooded with numerous strategies claiming to be the best of the best. Each of these was put through rigorous tests at the arcades. The end result is this book: a fundamental source for everyone serious about their scores.

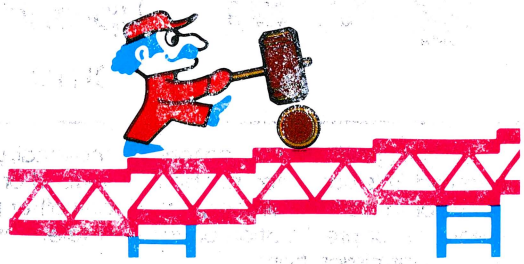


There are two types of video games: those that rely primarily on skill, and those that rely primarily on strategy. Games of skill are numerous: Defender and Centipede are two of the best. It's more important in skill games that your reflexes are sharp—that you can observe and react quickly and accurately. Games of strategy—such as Donkey Kong and Qix—require a lot of mental gymnastics. Strategic games don't demand the reflexes, but they do demand the planning and the cunning. This book recognizes these important distinctions and gives each game its proper emphasis. Each of our major games includes both an Element and a Strategy section. Elements are the most important skill aspects. Strategy speaks for itself.



There's more to this book than reflexes and strategy. The nine top video games boast a wealth of material unavailable in any other source. You'll discover how some of these games were developed—from the people who developed them. We'll give you facts and figures on how much money each game makes and on who it appeals to. We'll even discuss home games that might appeal to your specialized interests. After reading about the games, you'll know everything you'd possibly want to know—from people who know what they're talking about.



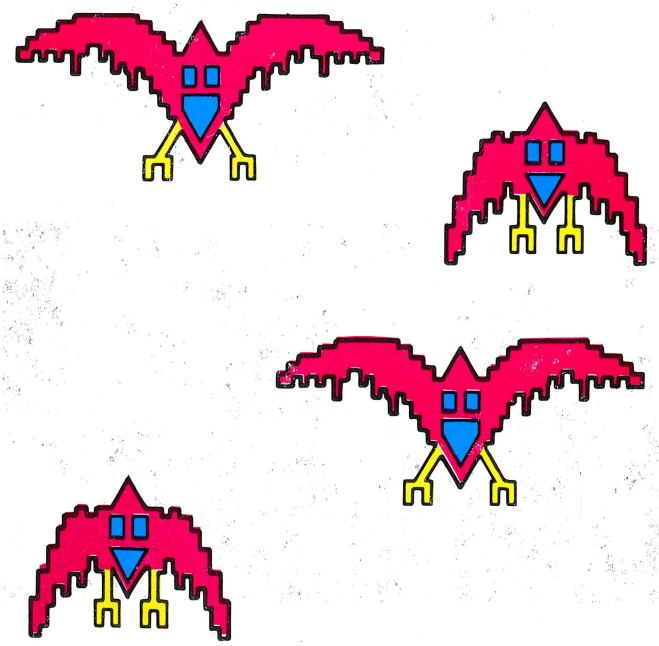


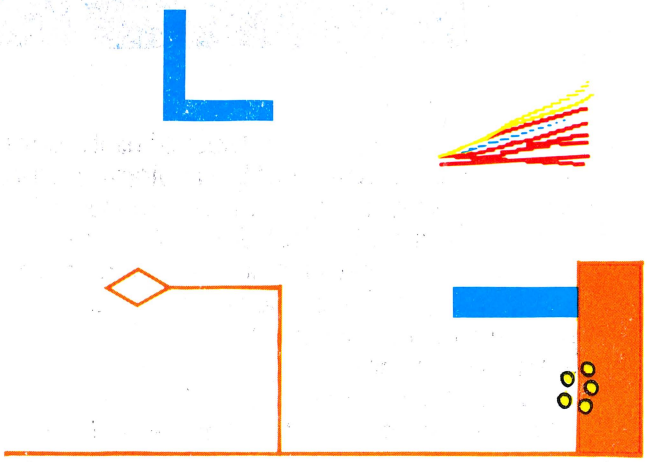
How did we choose the best games? It wasn't easy. We had various detailed reports to study endlessly. The only games that *had* to be in this book were Pac-Man, Defender, and Centipede. The other placements were up for grabs. Donkey Kong quickly made the list (the top money-making game for weeks), as did Tempest and Qix (the fascinating mind game). We fought bitterly over the final three positions in our top nine,

settling finally on Omega Race (for its approachability), Phoenix (for its graphics and levels of play), and Asteroids (for its phenominal staying power).

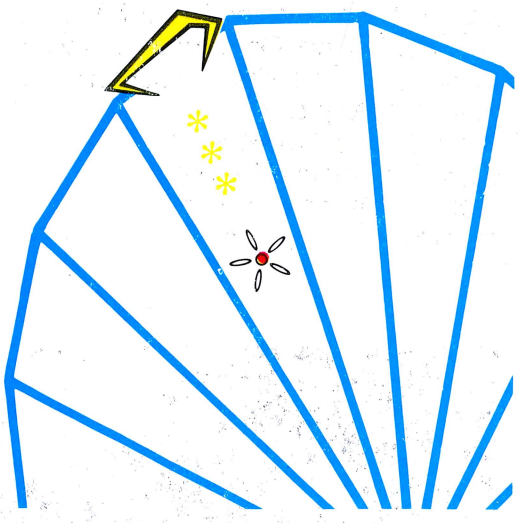
There were several contenders. Four of those contenders are given a voice. Frogger and Missile Command have devoted audiences, and demand space in this book. Ms. Pac-Man and Turbo are fascinating new games that deserve a page each. And there were several others that just missed the contending spots.

The video future is baffling. Many pretend to know the secrets of the future. But take it from us, none do. We've listed six up-and-coming games on page 63. These are our predictions for the future. What are yours?





The better you get, the harder they make it. It's a dog-eat-dog world out there. And video games are some of the hottest dogs in town. Manufacturers are developing games that are downright difficult to play. Their idea is to get you spending more money. Even the games that were once simple are being transformed into quarter-eaters. Pac-Man is the classic example. Once you people discovered the secret patterns, you were able to play the machine for 30 minutes or more—on one quarter. Some game owners have started altering their machines to combat your patterns. You've got to learn to fight back. And there's no better way than with this book at your side.



Turn to any page. Start learning the best ways to play the best games. Become the Arcade Aristocrat: that majestic person in control of the machines. Over 50 experts have been spending a good portion of their lives getting this book together. You've got one massive source of knowledge here. Use it. And good luck!

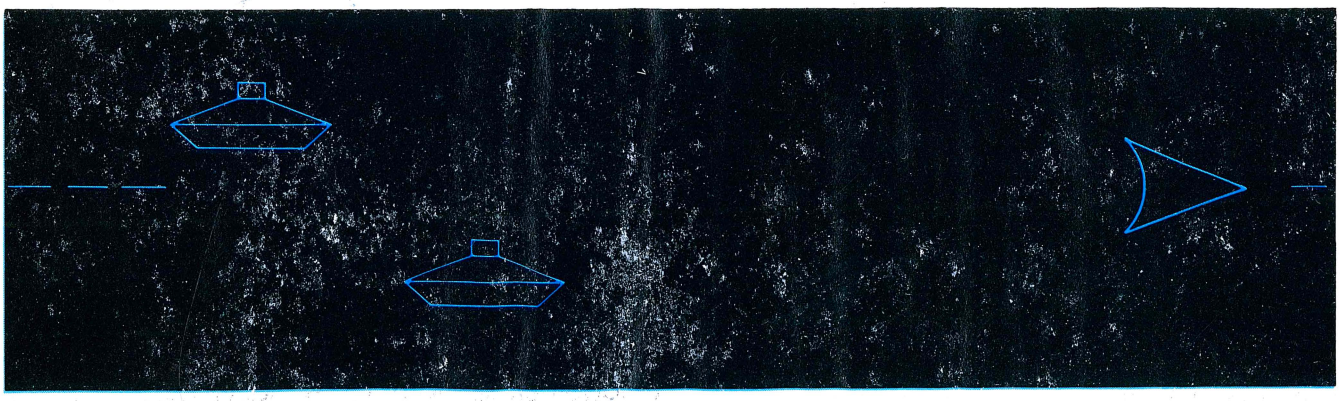
You almost didn't read this. Most of us thought Asteroids was a dead—or at best dying—game. Then we started reading our mail. Asteroids, to our surprise, is anything but dead. In fact, it appears to be coming back. Perhaps people are rediscovering it—or playing it for the first time. Whatever the cause may be, Asteroids is alive and well, thank you.

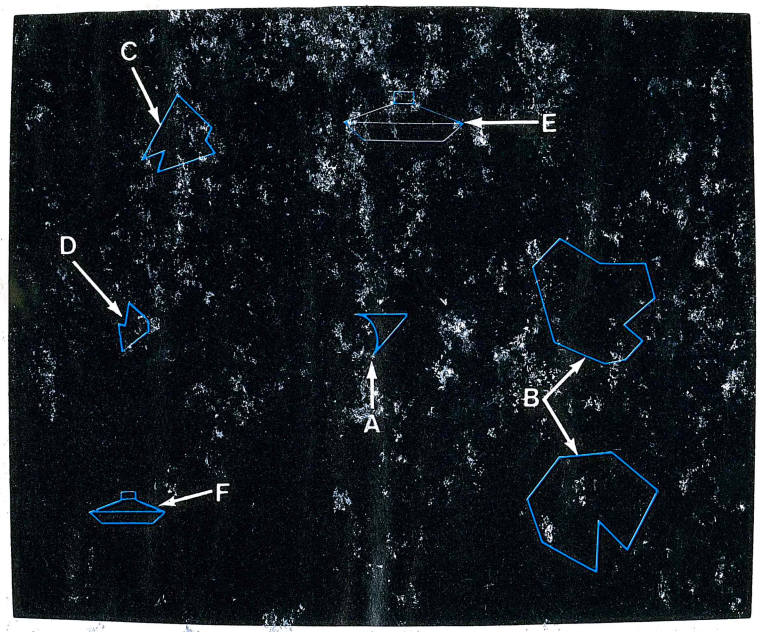
It's the one dependable game. While most arcade owners can run their business without Space Invaders or Galaxians, few dare to remove the Asteroids machine. They know their patrons will simply take their quarters elsewhere. If you bring three dollars and one hour to the arcade—and spend $2.75 in ten minutes—what are you going to do with your remaining 50 minutes? Play Asteroids, of course.

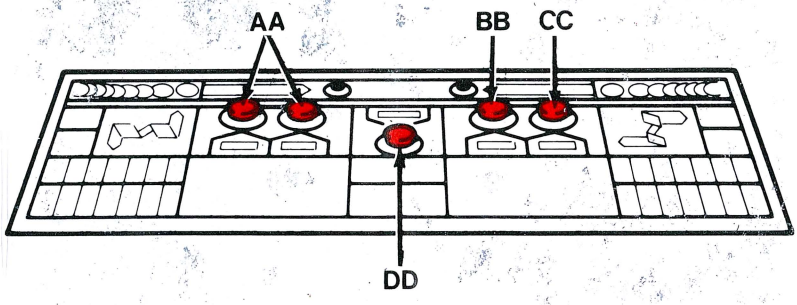
That's not to say it's an easy game. It takes awhile to develop the necessary skills. You command a space ship that can move anywhere at will around the screen. The most important skill is learning how to control the moving space ship. The object of the game is simple: Destroy the Asteroids and the UFO's for points. Once all the Asteroids are demolished, a new group of them appears.

Asteroids stories are numerous and notorious. Marathons have been held periodically, and players have stayed on the game over 50 hours before tiring. And that's what Asteroids is all about: Stamina. Once you get the hang of the strategy, the question becomes: How long do you want to play?

These instructions should please both tyros and pros. Beginners will learn the secret strategies. Pros will see their favorite strategy confirmed. And to think we almost missed this one!







ELEMENTS

A. Spaceship. You command this Spaceship through space. You can move anywhere on the screen. You can even move off the screen and reappear on the other side. Spend your initial quarters moving your Ship around. Don't let it idle in the middle. High scores require adept and practiced movement.

B. Large Asteroids *(20 points).* All Asteroids appear on the screen initially large. You must break them up into smaller pieces. The first screen sends forth four large Asteroids. Up to 16 are eventually released on later boards.

C. Mid-Size Asteroids *(50 points).* After hitting a large Asteroid, it breaks into two mid-size Asteroids. These move faster than the large Asteroids.

D. Small Asteroids *(100 points).* After striking a mid-size Asteroid, it splits into two small Asteroids. These are the fastest moving Asteroids of all.

E. Large UFO *(200 points).* This alien ship always enters from one of the sides—never from the top or bottom. It can fire, but at random. It does not track your Ship.

F. Small UFO *(1000 points).* Good strategy means killing as many of these as possible. The small UFO can only enter from the sides, like the large one. It, however, tracks your Ship when firing. It always shoots slightly in front of you or slightly behind you. Treat the small UFO with the respect it deserves.

AA. Rotation Buttons *(Left and Right).* As indicated, these buttons will turn the nozzle of your Ship left or right. These are important buttons to master in assuring accuracy of your Missile fire.

BB. Thrust. This button will move your Ship forward in the direction your nozzle is pointing. It is important to understand intuitively how Thrust will affect your movement.

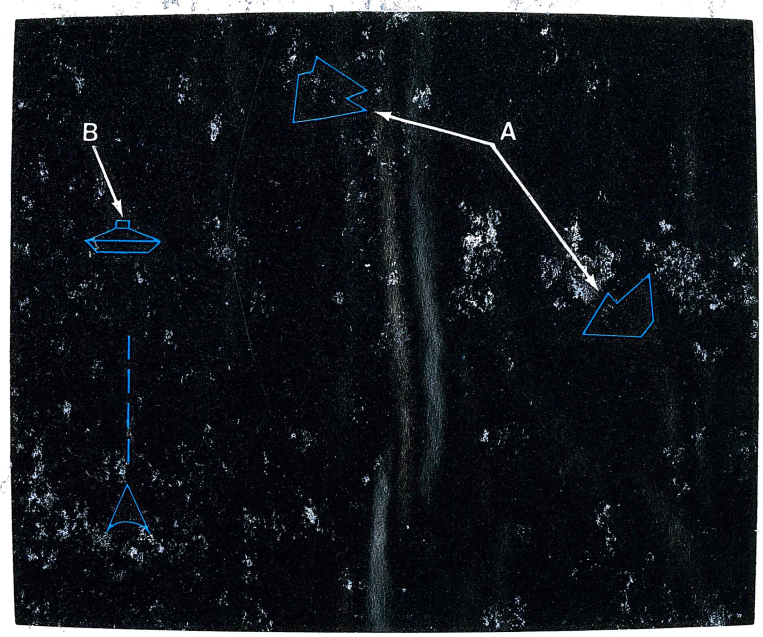
CC. Fire Button. You can shoot up to four stray Missiles before you run out of fire. When one of those Missiles hits an object or clears the screen, you get additional fire-power. Our advice: Never be without fire-power. Have a maximum of three Missiles in the air at a time.

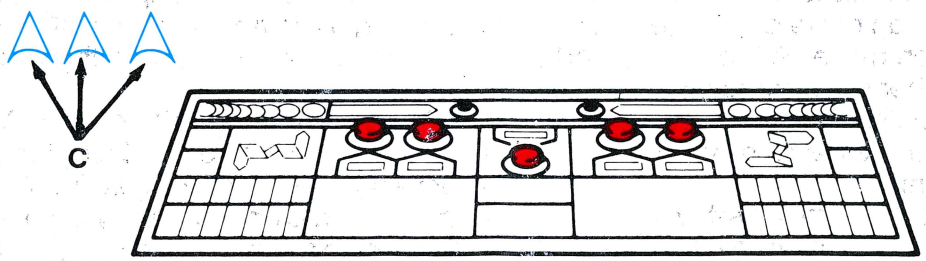
DD. Hyperspace. This will enable your Ship to disappear and reappear instantly somewhere else on the screen. One problem: You never know where you'll end up. You may find yourself in a more dangerous situation than you left. Think of Hyperspace in emergency terms only.

Spaceship. *This simple-looking shooter is far from simple. The ability to rotate 360 degrees combined with variable Thrust gives you limitless movement on the screen. For even more control, your Ship can fly off the screen at any point and reappear at the exact opposite point on the screen. You can even fire Missiles off the screen to have them appear on the other side.*

Asteroids *(20, 50, and 100 points). These three types of space rocks are your meekest adversaries. Their point value increases as their size decreases. The large Asteroids appear first on each new screen. They move slowly and are easy targets. When hit by your Missiles, a single large Asteroid splits into two faster moving, mid-size Asteroids. In turn, these are split by Missile fire into two "Space Pebbles."*

UFOs *(200 and 1000 points). These are two different types of enemies. Again, the smaller target is worth more points. Both of them enter only from the sides of the screen (not the top or bottom), and both will shoot at you. The large UFO fires blindly and at random. The smaller one will track your Spaceship, however, and fire much more accurately.*





STRATEGY

As the experts know, there's just one strategy. Learn it. It's basically simple: You shoot away all the Asteroids, leaving one or two on the screen. Then position yourself in one of the four corners and ambush UFO's as they appear.

A. Always leave at least one Asteroid. You should probably leave at least two, mid-size or smaller. Once they're demolished — by stray fire or UFO collision — beware. Move to the center. The Rocks are coming. Do the same trick then, thinning out the Asteroids to one or two, and return to your ambush position.

B. When a UFO appears, fire rapidly. Use the two-finger method commonly employed by Asteroids wizards. That means tapping the button with alternating fingers, for ultimate speed. You have the advantage over UFO's. They don't shoot until they've been on the screen for a few seconds. Kill them fast. If a UFO—large or small—gets by you, simply get out of its way.

C. Bonus Ships. You get a bonus Ship every ten thousand points. If you've successfully mastered the ambush strategy, you'll soon have more Ships than you'll know what to do with.

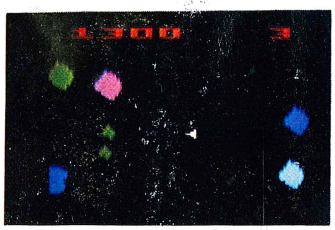
TESTIMONIALS

Anonymous, age 32: Chicago, IL. "The first Asteroid machines had a bug in them. You could sit in the lower left-hand corner and shoot away. Nothing would get you. Although Atari fixed a lot of those machines, there are still plenty of them around."

Ted, age 19: Noblesville, IN. "If you want to know the one best tip, never fire in the direction you're moving. Always turn and fire, then move on. It works for me every time."

Asteroids AT HOME

This classic Atari arcade game has many home variations. Only Atari's home version is anywhere close to the original, however. Atari's standard ASTEROIDS cartridge is OK, but a new cartridge—soon to be available for the Atari Video System X—promises to be even better.



If you want the most realistic Asteroids cartridge, buy Atari's Asteroids. Although the speed of the game is somewhat slower, the feel is quite similar.

Evidence of Asteroids' continuing popularity can be found in a full array of new "Asteroids-like" games. Mattel's new cartridge, SPACE HAWK, propels a man—instead of a spaceship—through space. You're powered by a propulsion pack and armed with a Laser. You must contend with, "enemy craft, comets, space amoebas, and rainbow bubbles filled with deadly astrogas." You have five Shields. If you get hit, you not only lose a Shield, but you are sent into a space spin to boot. Hyperspace can be employed when you get into trouble. The game can be played at four different levels of difficulty.

The action of U.F.O. (N.A.P. Consumer Electronics) is similar to Asteroids. Many people even consider it a superior game. You can destroy U.F.O.'s with Laser fire or by causing them to come into contact with your Force-Field. You have unlimited ammunition, but your Force-Field requires a recharge period.

Astrovision will soon offer a game called SOLAR CONQUERER for their Astro Arcade home machine. We hear that it is an Asteroids-like game. A company called Entex will offer a game called VIDEO SPACE FORCE for its new Adventure Vision machine. This appears to be quite similar to Asteroids, complete with Hyperspace.

Asteroids (Atari Incorporated)

Bonus:	Extra ship every 10,000 points *ad infinitum.* Potentially yields enormous scores.
Popularity:	Approximately 30,000 machines in existence to date. Average machine still bringing in approximately $193.00 per week as of December 1, 1981. Still on the top 20 after all this time on most charts.
Location:	Its classic simplicity makes this a machine that does well anywhere. And considering how the word "Asteroids" has become synonymous with space games, few places can survive without it.
Enemies:	Meteors (3 sizes) and missile-firing UFOs (2 sizes). Enemies remain the same no matter how high your score.
Approachability:	Easy to understand and become involved in the game your first time around. Lots of tips circulating word-of-mouth, to increase your playing time.
Sex Appeal:	60% male, 40% female. Stereotypically, a male game.
Age Appeal:	Appeals to all ages. And especially appeals to those with the stamina to keep at it.
Control Comfort:	Left and right Rotation, Thrust, Hyperspace, and Fire buttons are simple to use. No pain evident once controls are mastered.
Skill *vs.* Strategy:	One simple strategy provides high scores. Lots of fast-paced target-shooting skill and avoidance maneuvering necessary.
Clocked Or Not:	Not
Special Effects:	Black and white graphics. One of the pioneering explosion games.
Value For Money:	Once you master the strategy you can play for hours on one quarter.
Pros:	Simple strategy for impressive scores; good space sensation; sensitive controls.
Cons:	Primitive graphics; too many experts.

Centipede

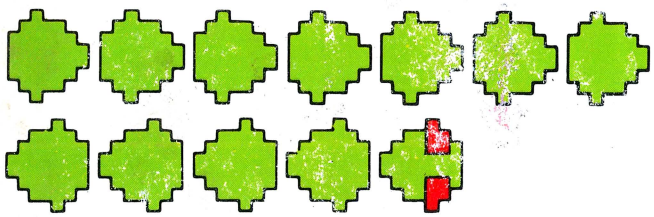
Video insects? Centipede is Atari's most successful video game since Asteroids. The game was introduced in July of 1981, and has set proudly on the top 10 money-making list ever since. At present, the average machine rakes in approximately $225.00 a week.

Centipede plays on our futuristic fears: in the end, the insects will prevail. In fact, the insects in Centipede are so huge (radiation, perhaps?) that we can no longer squish them flat or swat them dead: We must blast them senseless with a giant Bug Blaster.

The game is not for the meek. Centipede is a fast-paced game with incredible distraction devices. Your main task is to destroy every segment of a Centipede in order to clear the screen and make room for a new Centipede. The obstacles are numerous. The Spider tries like mad to kill you. The Flea clutters up the screen with Mushrooms. The Scorpion poisons those Mushrooms, driving the Centipede mad. New Centipedes bring new colors to the game and, of course, faster action. Every 12,000 points yields a new Bug Blaster.

If high scores aren't enough, consider this: If you achieve a score of 800,000 points, the machine will "freak out." Reports vary from odd letters at odd places to elongated Spiders and other unexpected video images. This seems to be an Atari trademark. Missile Command, as many of you know, also "freaks out" at around 810,000 points. So this is our challenge to you: Get 800,000 points and tell us what you see.

Centipede survives bizarre tournament. Centipede was the video feature in a bizarre tournament held recently in Chicago. The prizes for the best Centipede masters were high: $25,000. The rules were awkward: Each player had but three minutes to demonstrate his or her skills. To make a long story short, the checks bounced and chaos reigned. Atari came through in the end, and made good all the checks (the problems were not Atari's fault). If the tournament people ever get their act together, we may see more contests in the future.



Centipede *(10 points per segment, 100 points per head). This elongated insect is a very complex adversary. It winds its way back and forth across the screen from top to bottom. Its path is determined by the maze of Mushrooms that randomly fill the screen. The Centipede will drop one level and reverse its direction each time it makes contact with a Mushroom or the side of the screen. Each segment of the Centipede that is shot turns into a Mushroom. The segment directly behind it becomes a new head. This holds true for a Centipede shot in the middle. It will divide into two independent insects, each with a head.*

Spider *(300, 600, or 900 points). This pesty bug is crafty, but his abilities are limited. He can only enter from the sides (about ⅓ up) and can only move up and down, and forward. Only one Spider can be on the screen at a time. Contact with this insect means death to your Bug Blaster. Shooting it gains variable points depending on its distance from your shooter.*

Flea *(200 points). A Flea will only appear if there are less than five Mushrooms in the lower portion (working area) of the screen. The flea always makes a rapid vertical descent, leaving a random number of Mushrooms behind it. It takes*

ELEMENTS

The best way to protect the earth from this terrifying insectile army is to know the enemy, to study and learn each insect's individual characteristics. Centipede is, basically, an observation and reaction game. Strategy plays a role, but a minor one. The players with the best knowledge and the best reactions will realize the best scores. Read, therefore, this section carefully. It's your first step toward phenominal play.

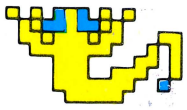
A. The Centipede *(10 points per segment, 100 points per head).* The Centipede is the King of the video Kingdom. Your first priority is to kill the King, after which a new King—a new Centipede—appears: all decked out in new colors. The King isn't King for nothing. This is one crafty insect that can divide and multiply as necessary. *Don't let it divide:* Always attack from the head or the tail and move progressively toward the other end. *Don't let it multiply:* Destroy every Centipede segment before it hits the bottom and reproduces. The worst position to be in is with segments attacking from both over and under your Bug Blaster.

B. The Spider *(300, 600, or 900 points, depending on distance from Bug Blaster).* The Spider is the King's soldier. His immediate goal is to attack and kill you. He also eats a few Mushrooms now and then, which may provoke the Flea. Don't allow the Spider to interfere with your game. Only one Spider can appear at a time, and that Spider can never retreat. He can only move up, down, or forward. Kill the Spider if it's convenient. If you can't easily kill him, don't fret. Some top scorers can kill the Spider consistently at 900 points. Don't attempt to do this when you're learning the game. Only attack the Spider after all other elements are mastered. The best initial advice is to be aware of the Spider at all times. If he's dangling up and down on your left, stay to the right and concentrate on the Fleas, Mushrooms, Scorpion, or Centipede. Once the Spider exits, however, be careful. A new Spider can enter from either side.

C. The Flea *(200 points).* The Flea is the King's worker. His primary function is to replenish the Mushrooms you've destroyed at the bottom of the screen. It takes two shots to kill a Flea. We like to kill lots of Fleas, although some players simply scratch away at the Mushrooms they leave behind. Fleas only appear when less than five Mushrooms sit in your working area. That working area is the distance from the bottom of the screen to the height your Bug Blaster can reach. Fleas will keep coming until at least five Mushrooms remain in that working area. It's easy to get out of a Flea's path. Don't let them distract you.

D. The Scorpion *(1000 points).* The Scorpion is indeed the Queen. She's the prize. Her main function is to poison Mushrooms. If a Centipede hits one of these poisoned Mushrooms, it will dive quickly to the bottom. By all means, kill the Queen. She's your key to top scores. And the real trick is to kill the Scorpion fast, before she poisons the Mushrooms.

E. The Mushrooms *(5 points).* There are three types of Mushrooms: those that are (1) supplied at the beginning of the game or by the Fleas; those that (2) appear when a Centipede segment is destroyed; and those that (3) are poisoned by the Scorpion. The Type 1 and Type 2 Mushrooms determine the path that the Centipede will take toward the bottom of the screen. You will learn, under Centipede Strategy, how to take control of



two shots to kill a Flea. If hit only once, the Flea's rate of descent will become lightning fast.

Scorpion *(1000 points). This venomous she-devil seems to appear just when you think you're doing well. Entering from either side of the screen, the Scorpion takes a straight path across, poisoning every Mushroom she contacts. This transfiguration of fungi has a frightening effect on the Centipede.*

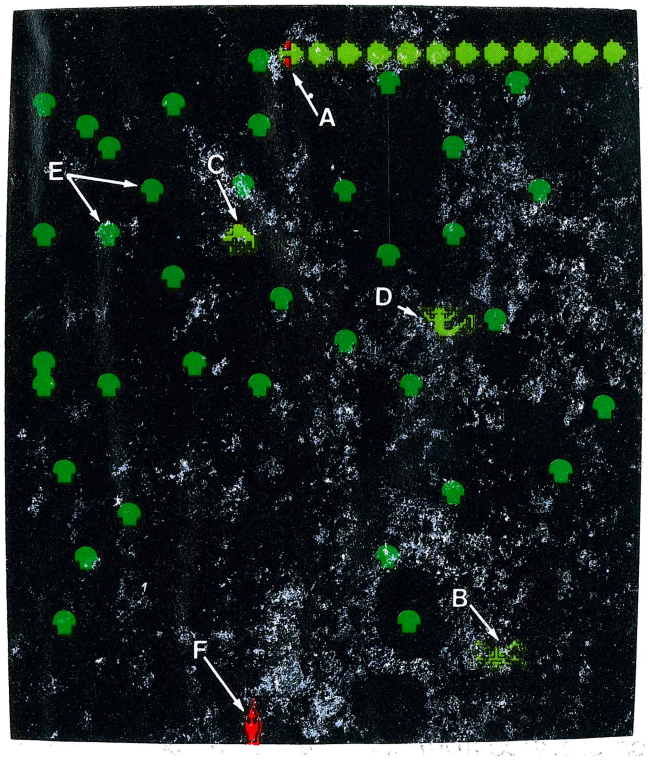
Poison Mushrooms *(5 points). It takes four shots to destroy a Mushroom that has been poisoned by the Scorpion. Contact with one of these fungoid Mickey Finns causes the Centipede to immediately plummet to the bottom of the screen.*

Bug Blaster. *This bottom cannon, looking somewhat like a snake's head, is you. You can travel the width of the screen and approximately one third of the way up. Each shot that you fire must strike an object or clear the screen before you can fire again.*

Trak Ball. *This superb adaptation of the standard joystick allows for the ultimate in cannon movement. You can maneuver your Bug Blaster quickly and fluidly within the bottom ⅓ of the screen.*

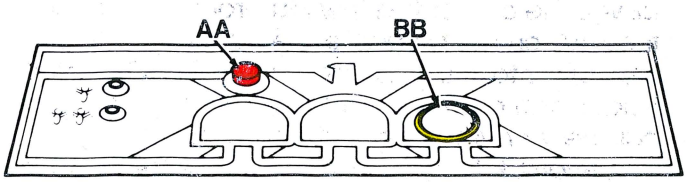
that path. The only real difference between Type 1 and Type 2 Mushrooms is that you score five extra points for Type 2's after your Bug Blaster is destroyed. You can get 5 points for destroying Type 1 Mushrooms. The poisoned Mushrooms are dangerous. If a Centipede contacts a poisoned Mushroom, it dives quickly to the bottom of the screen. The only way to stop its plunge is to kill it by the head!

F. The Bug Blaster. This, my friend, is you. And you'd better keep yourself moving if you want to stay alive. Don't let yourself idle. Stay active. Be the athlete. Like Muhammad Ali, dazzle them with your footwork—and time your punches for the greatest impact.



AA. Fire Button. You have an unlimited amount of ammunition. Even so, a wise use of it is advised. Only one shot at a time is possible, and your succeeding shots can only be fired once that first shot has either struck an object or cleared the screen. When rapid fire is necessary—when clearing Mushrooms or killing lots of Centipede segments—hold your finger down on the button. There's no need to lift your finger and press down for each shot. General rule: Always destroy objects at the closest distance possible. This will ensure greater accuracy and quicken the time between shots.

BB. Trak Ball. This ball will move your Bug Blaster up, down, across, and at an angle within a limited space at the bottom of the screen. You are not limited to simple back and forth movement, as you are in many video games. The Trak Ball should become a natural extension of your fingers. You can be super-quick with this ball, dodging Spiders and attacking Centipedes. Go slow at first, and build your speed.



STRATEGY

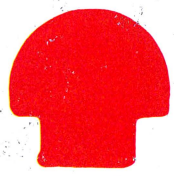
Although your Centipede success rests primarily on your abilities to observe and react, there are a few strategic techniques that will increase the scores of your games. The major winning tip is: Control the board; don't let it control you. *You* determine the path of the Centipede. *You* determine when a Flea will appear and when it won't. There are many tried and proven strategies. Usually, the strategies are so individualistic that it's impossible to translate one person's techniques into winning tips. What we offer here are basic strategic weapons. It's your task to build on them.

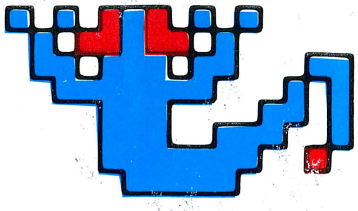
A. Always clear a path through the Mushrooms. The path should be at least three Mushrooms wide and kept clear at all times. It takes four shots to destroy a Mushroom. Count your shots and don't waste them. Whatever you do, don't inadvertently split a Centipede while clearing your path. You'll have too much to contend with. The path will give you a clear shot at the Scorpion at all times. This is essential to your grabbing 1000 points for each Scorpion. **NOTE:** For total control of the board, it is best to clear two paths; one on the right and one on the left. This will ensure a clean Scorpion kill before she poisons the Mushrooms. Only attempt to clear two paths after you successfully and consistently clear one.

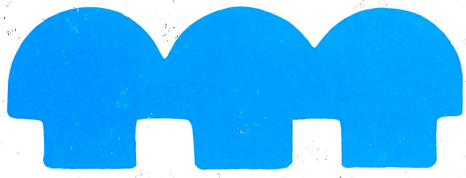
B. Kill lots of Fleas. Fleas are worth 200 points, and with a little practice, are easily destroyed. Be careful. It takes two shots to kill a flea. If you only wing it with one shot, it will double its speed to the bottom. The way to attract lots of fleas is simple: erase all the Mushrooms in your working area at the bottom of the screen. The Fleas will keep coming until they have left five Mushrooms on the bottom. Make sure you don't split the Centipede by mistake when trying to kill a flea.

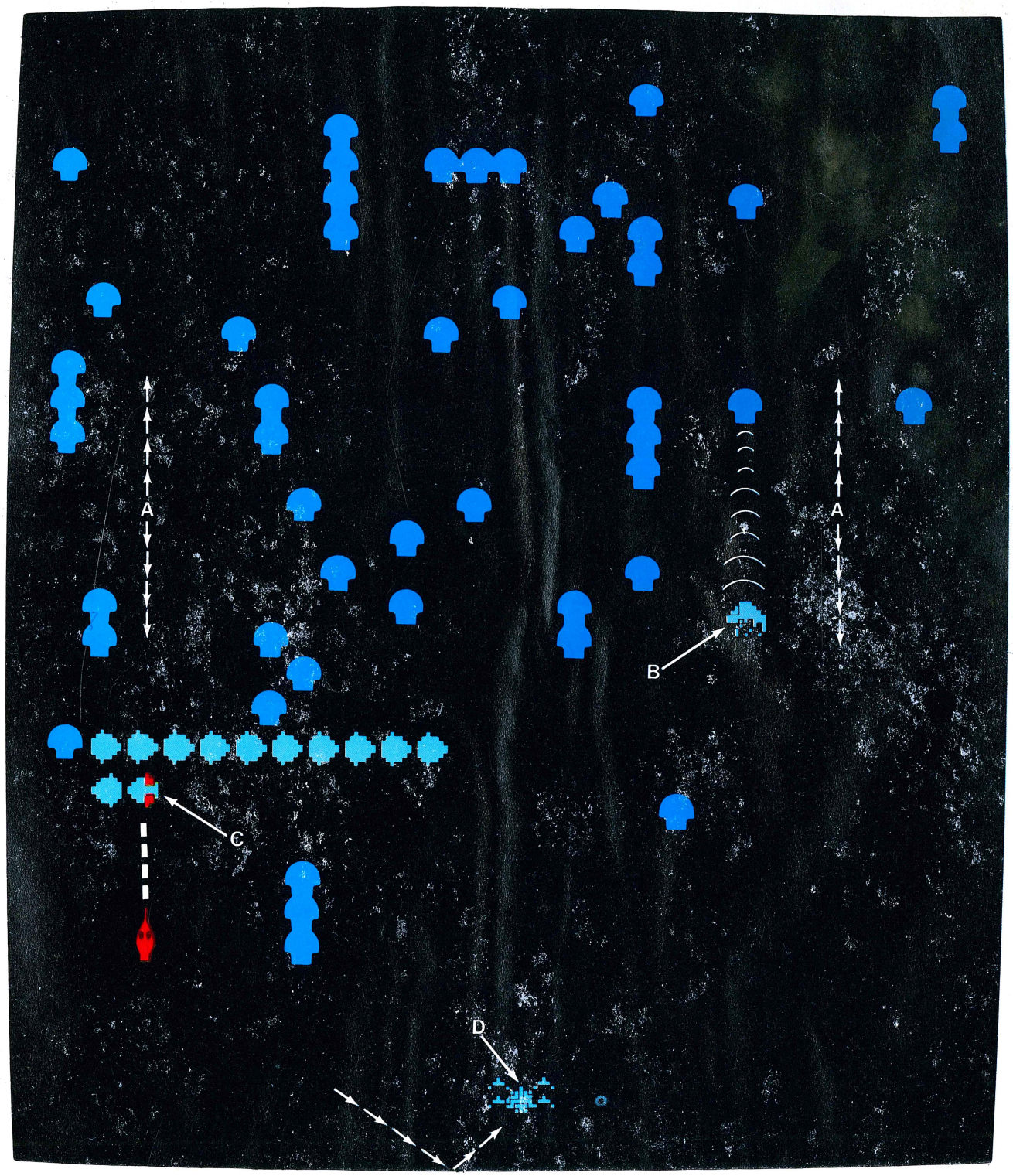
C. Kill the Centipede in one series of shots. Let the Centipede worm its way down to just above your working area. When you've got a clear shot, strafe it from the head to the tail with a rapid series of shots (your finger pressed down on the trigger). If killed from the head to the tail, you'll get 100 points for each section—for a new head sprouts after you've destroyed the original head. **NOTE:** The length of the Centipede diminishes as the screen progresses. The first screen has one 12-segment Centipede (head and 11 segments). The second screen has an 11-segment Centipede (with head) and a single stray head. The third screen has 10 segments and 2 stray heads, and so on. Kill the stray heads as soon as possible. They'll cause you unnecessary trouble if you let them get too close.

D. Always work on the safe side of the Spider. The safe side is the side to which he isn't heading. If he's going left, stay to the right. The Spider won't be able to attack you (he can't retrace his steps) until he goes off the screen and returns. Don't count on the Spiders for points when you're learning the game. Kill them when practical or necessary. Get your points from the Fleas, the Scorpions, and the Centipedes. Once you're confident of your basic abilities, you can begin to kill the Spider for points. This is dangerous and requires super-sensitive reflexes.








A
A
B
C
D

TESTIMONIALS

Dan, age 17: Evansville, IN. "Clear a few rows of Mushrooms in the middle and sit underneath. You can get the Centipede as it comes down.

Lin, age 26: Berkeley, CA. "I like shooting Fleas. I clear all the Mushrooms at the bottom and just start shooting Fleas."

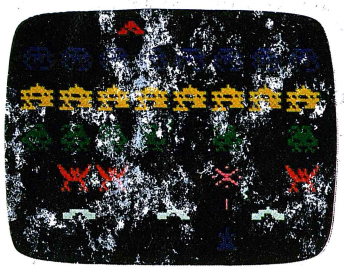
Fran, age 18: Milwaukee, WI. "I'm embarrassed to accept less than 900 points for killing a Spider. You've gotta' be good to do it, but I'm good."

Darlene, age 23: Seattle, WA. "It's a fast game, so I try to slow it down. I try to delay the Centipede as long as possible by wiping out the Mushrooms at the top. And I always ignore the Spiders."

Centipede AT HOME

Atari guards the secret of Centipede with more enthusiasm than any of their games. An Atari home version of Centipede is reported to be finally in the works. They're spending some time getting it right. They aren't rushing it. Home players should eventually be rewarded with a game quite similar to the classic arcade game. A cartridge is said to exist now at Atari headquarters in California. But it won't be released until all of the bugs in the computer system are removed (leaving, of course, the Centipede, Scorpion, Spider, and Flea).

In the meanwhile your best alternative is to play home games requiring similar skills. SPACE INVADERS and its ilk are obvious choices. You're limited to horizontal movement, but you can still track and fire at descending targets. SPACE INVADERS is an Atari cartridge. A similar cartridge from Mattel Electronics is called SPACE ARMADA. On the Magnavox Odyssey system, there is ALIEN INVADERS PLUS. Using laser fire, you battle an alien force led by the Merciless Monstroth.



Although you won't be able to move your Blaster up or down, Space Armada, by Intellivision, will allow you to practice your Centipede target-shooting.

All of these home cartridges enable you to practice your tracking and firing skills. But as Centipede players know, there's more to Centipede than tracking and firing. The up-and-down movement of the Bug Blaster in the arcade game can't be matched in these home games. And you never have to deal with such a nagging enemy as the Spider.

Centipede (Atari Incorporated)

Bonus: Extra Bug Blaster every 12,000 points, *ad infinitum.*

Popularity: Approximately 40,000 machines in existence to date. Average machine brings in approximately $203.00 per week as of April 1, 1982.

Location: Does equally well at both street and arcade locations.

Enemies: Your constant enemies are the Centipede and the Spider. Occasional enemies are the Scorpion and Fleas.

Approachability: Few on-machine instructions. Basics are easy to pick up. Early survival is possible by firing away at everything you see.

Sex Appeal: 50% male, 50% female. Cuteness overcomes most people's squeamishness about bugs.

Age Appeal: All ages except those who are entomophobic.

Control Comfort: Excellent. Trak Ball eliminates the common blisters and aches associated with joysticks. Older machines more comfortable than new ones. The Trak Ball has to be broken-in.

Skill vs. Strategy: At first, fast reflexes are crucial. Once reflexes are developed, strategy adds to point value. Reflexes always top factor, however.

Clocked Or Not: Not

Special Effects: Brilliant color changes on every screen. Good sound effects every 12,000 points. Otherwise, typical computer forms and shapes.

Value For Money: Good at first. Even better after the skills are mastered. The bonus Bug Blasters will keep you going for quite awhile.

Pros: Original and unparalleled concept; fluid controls; promotes self-competition.

Cons: Lacks screen variation; low strategy level.

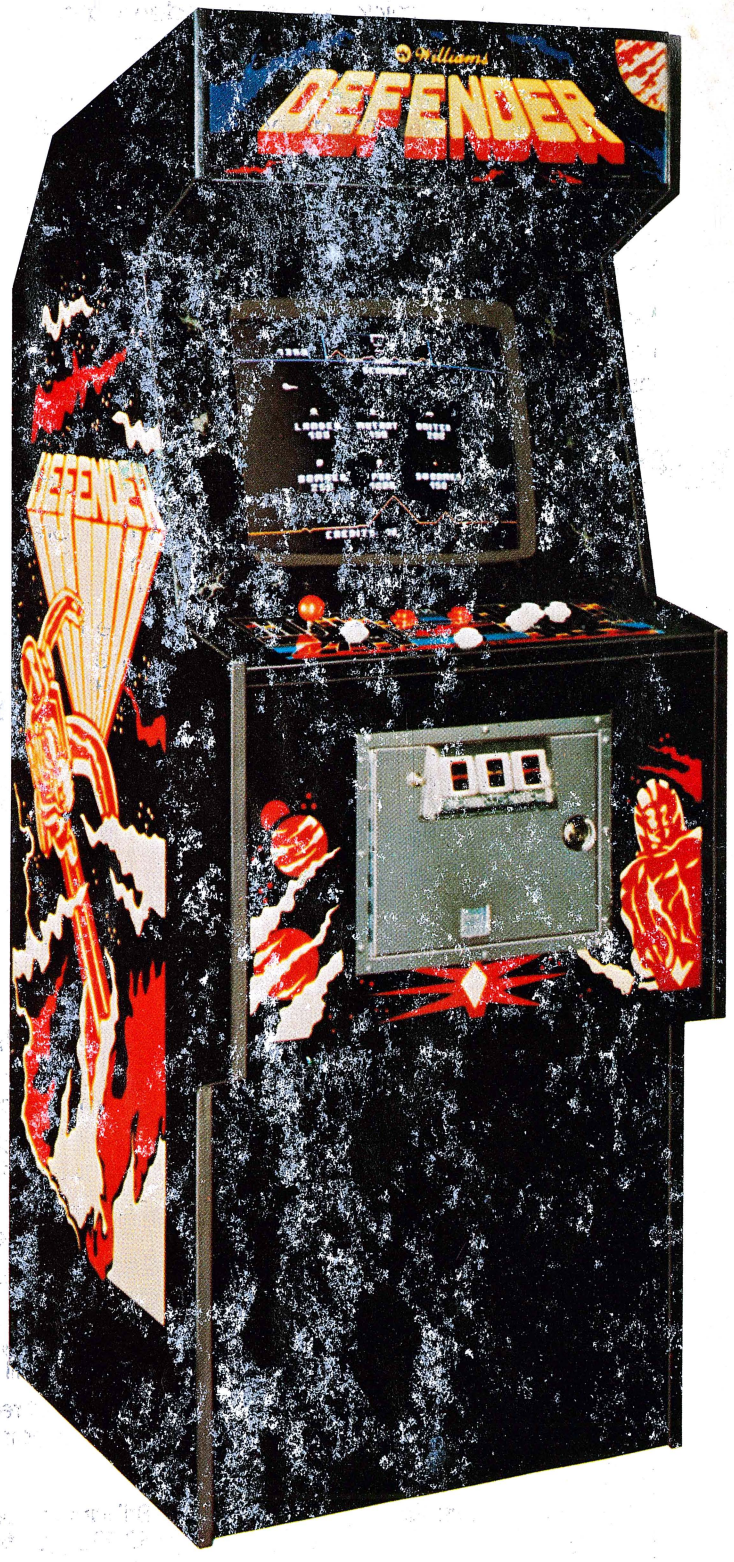
Defender

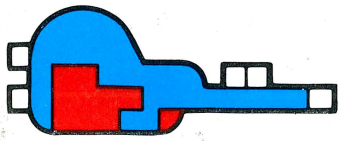
Defender was the top video game of 1981. It captured six of eight top awards issued by *Playmeter:* the trade magazine for the Coin Operated Entertainment Industry. And Williams Electronics is still overloaded with orders for this blockbuster machine. Although Defender may appear to be an ordinary video space game, don't be fooled. This is one of the most complex, most remarkable games to hit the arcades. One of the most amazing aspects of Defender is the graphics: There are 256 different color combinations that may burst onto the screen at any time. Add to that a variety of noises and a grand parade of shapes and movements and you've got yourself one shining example of video possibilities.

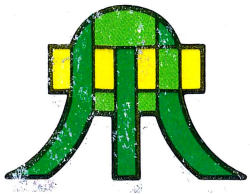
Defender is the ultimate video game of skill. Steve Juraszek, a one-time national Defender champion (high score 15,963,100), states that, to be a top Defender player, you must be "very mechanically inclined," and you must have "good eyesight and quick reflexes." No tricks are involved in high scores. The secret is concentration and practice.

The fate of the world is at your fingertips. You command a Spaceship defending innocent Humanoids from alien attack. This is a serious responsibility. If your Humanoids are captured, and carried from the Earth to alien territory, they mutate. And these Mutants become dangerous enemies of your Ship. The game is played in a series of attack waves. Once you've destroyed all the Landers in an attack, a new wave begins. And the game speeds up.

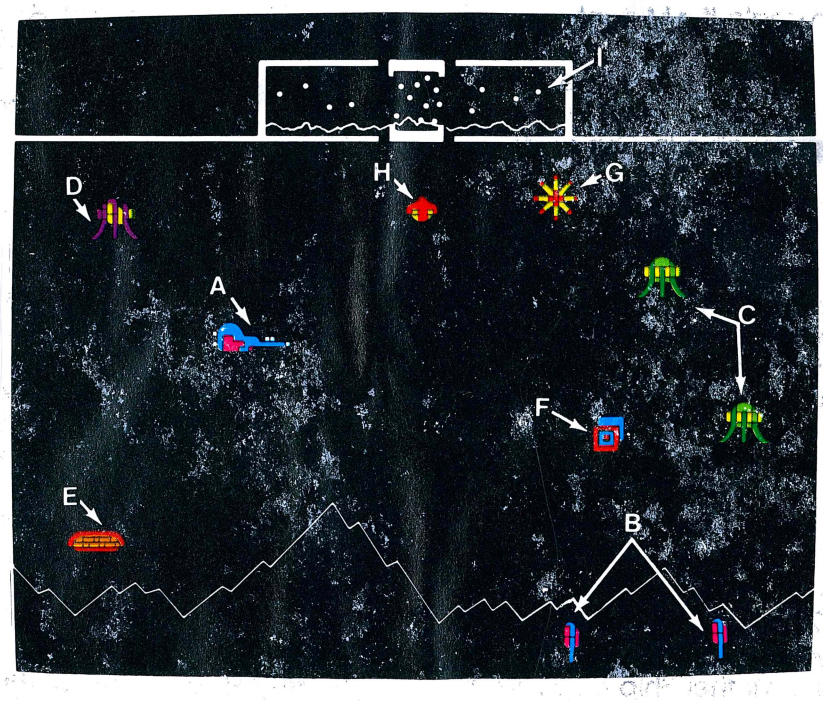
They're the best. Considering the skills involved in Defender, a top player earns a deserved snob status: Arcade Aristocrat. If you can beat Defender, you can beat any video game. Or so they say. As Steve Juraszek puts it: "I find most games boring after ... Defender." And as most Defender fans already realize, Williams has introduced a new game, Star Gate, which goes one step beyond Defender. Star Gate is reviewed on page 63.







Spaceship. *This brightly glowing craft is the Defender. It travels horizontally on your screen in either direction. The joystick determines its flight altitude. Constant pressure on the Thrust Button will result in constant acceleration. You have an unlimited source of Laser fire.*
Humanoids. *These colorful stick figures are the Defendees. They gather in little social clubs on the Earth's surface, awaiting their fate. Their role in the space battle is a passive one, unless they are successfully kidnapped by Landers and carried to the top of the screen. They become Mutants.*
Landers. *Their mission is to kidnap the helpless Humanoids from the Earth's surface and carry them off to Mutationville. They will fire at you, but not aggressively. They usually appear in groups of four or five.*



ELEMENTS

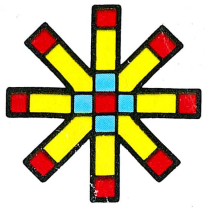
A solid understanding of Defender basics is essential to high scores. Spend your first Defender quarters experimenting, feeling out the personalities of each of the enemies and the possible movements of your Space Ship. After you know the elements, you're ready to properly defend the Humanoids.

A. Spaceship. You command this Spaceship over and under the Earth's surface. You can progress through the atmosphere at the speed you choose. You can reverse and you can instantly Hyperspace to another part of the world at will.

B. Humanoids. Humanoids are peaceful while they're still human. They often walk around the Earth's surface in groups. Don't shoot them. Protect them. If allowed to mutate, you've got one big problem on your hands. Although you'll survive an inadvertent collision with a Humanoid, the Humanoid will die.

C. Landers *(150 points).* You must destroy all the Landers on a screen to complete an attack wave. A Lander's basic objective is to grab Humanoids and carry them to the top. They'll fire at you, but you can easily avoid their fire. There are four to five Landers on a screen at most times.

D. Mutants *(150 points).* These are formed when a Lander successfully carries a Humanoid to the top of the screen. The Lander then sucks the Humanoid into his space craft and forms a Mutant. These are dangerous. Their main objective is to kill you, and they never shoot



Mutants. *If a Humanoid is captured by a Lander and sucked into his craft, he becomes one of these unsightly space critters. Mutants will fire at you only from an angle. If all of your Humanoids become Mutants, the world, as you know it, will explode.*

Baiters. *These elongated ships can shoot and fly faster than your Spaceship. They serve as irritants near the end of an attack wave in order to speed up the battle. They disappear with the destruction of all the Landers.*

Mother Ship. *Mother is right! On contact with one of your Missiles, these Pods give birth to any number of swirling Swarmers that will attack you. The Pods appear at predictable times throughout the battle. You will never see more than four of them at once.*

straight, always at an angle. If a Mutant appears, muster all your energy to kill it. If the Landers carry all of your Humanoids to the top of the screen, the world explodes. This is no pretty sight, and nearly impossible to stay alive in. Our advice? Don't let your world blow up.

E. Baiters *(200 points).* Baiters appear near the end of the attack wave, to speed up the game. They will track you closely. They can shoot faster and move faster than you. Kill the Baiters as soon as they appear. They're fairly large targets. If too many Baiters appear, you'll probably have to use Hyperspace. Baiters disappear when you've destroyed all the Landers.

F. Bombers *(250 points).* Bombers are fairly passive. They travel in groups of one to three, leaving Mine Fields behind them. You cannot shoot these Mines. You must avoid them. Try to kill the Bombers before they leave Mines.

G. Mother Ships *(1000 points).* Mother Ships (a.k.a. Pods) are some of your worst enemies. They also yield high points. One Mother Ship appears on the 2nd wave, three on the 3rd, and four on the 4th. When destroyed, five to seven Swarmers are released by the Mother Ship, and must be killed.

H. Swarmers *(150 points).* Swarmers are released from Mother Ships after the Mother Ship has been destroyed. These are no fun. They track you closely. Some people use a Smart Bomb the instant a Mother Ship has been killed. Others skillfully and cautiously kill the Swarmers one by one.

I. Scanner. This Scanner displays an overview of the entire war zone. Your playing area is bracketed. Your lasers cannot kill enemies past the playing area. This Scanner should be constantly monitored. If you want a real challenge, try playing the whole game with the Scanner only. Don't look at the screen. It will help develop and test your Defender skills.

CONTROLS

AA. Joystick. This maneuvers your Spaceship up or down—not across. You can safely move anywhere on the screen, even below the earth's surface.

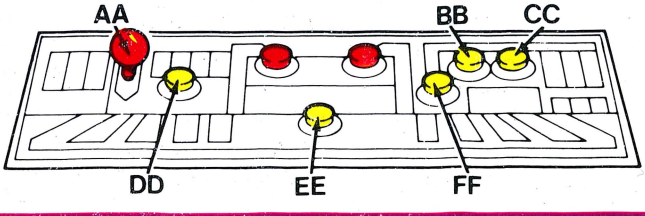
BB. Thrust. This control moves you forward at whatever pace you desire. If held down, you'll accelerate to top speed. If left alone, you'll stop.

CC. Fire. You have an unlimited amount of fire. Our advice: fire constantly. Develop "Defender Fingers."

DD. Reverse. There's no need to Reverse when you're learning the game. After you've mastered Thrust and Fire, use Reverse to eliminate the Landers as fast as possible, as keyed by the Scanner. Reverse is also useful in killing Mutants.

EE. Hyperspace. Again, there's little need for Hyperspace when learning the game. Hyperspace makes your Spaceship disappear and reappear—anywhere. You have no control over where you'll end up. The only real need for Hyperspace is when the Baiters appear or when your world has blown up.

FF. Smart Bombs. You begin with three of these, and earn a new one every 10,000 points. Again, there's no need for Smart Bombs when you're learning the game. Smart Bombs destroy everything on the screen. Use them only after you've scored 30,000 points, and then only when you need to. For example, when Mother Ships appear in a group, blast them senseless with the Smart Bomb. You'll earn top points.



STRATEGY

The key to strategy is staying alive. You get a new Smart Bomb and a new Ship every 10,000 points. As the game progresses, more aggressive enemies enter the playing area. To stay alive past 30,000 points, you'll need to know how to use each of the controls. The strategies below build on each other. It's essential to know strategy A before you can move to B, and so on. Once you get to strategy B, you're still using what you've learned in strategy A. You're simply adding to its depth. Remember: Your basic objective is to kill all the Landers on the screen to complete an attack wave. It's necessary to kill them fast, so that (1) they don't mutate your Humanoids and (2) Baiters don't appear.

A. Beginning Strategies. There are certain basic strategies that must be developed and learned as soon as possible. All of these strategies, once learned, will continue throughout your entire game.

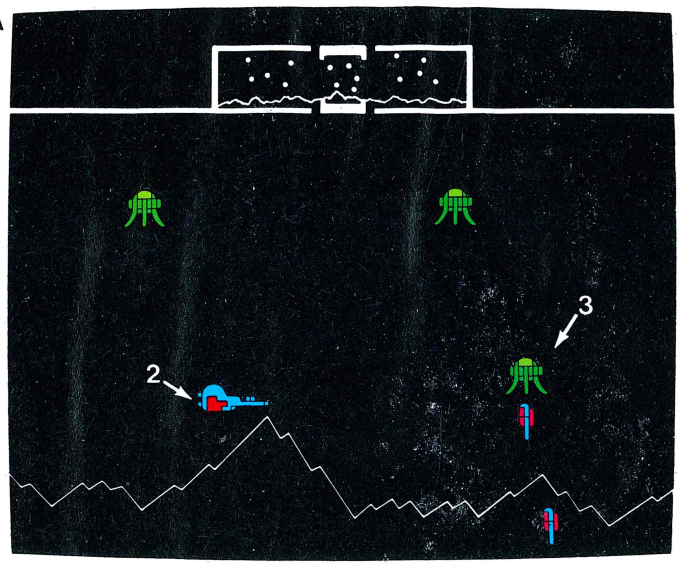
1. Hit the Thrust and Fire buttons together. Consider these two buttons as one button. Always hit them together and hit them as fast as you can. Develop "Defender Fingers." Don't stop doing this unless you're in an instant-death situation. It's important to keep moving and to keep firing.

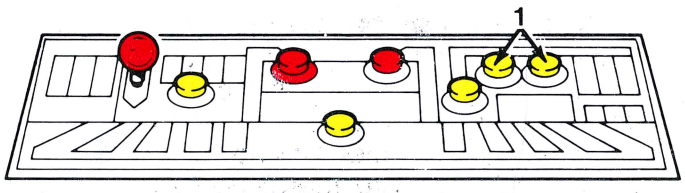
2. Fly low. Many top Defender players seldom fly more than two inches above the Earth's surface. It's important in adequately protecting the Humanoids.

3. Kill kidnapping Landers. Destroy the Landers when they're raising your Humanoids to the top. Don't kill your Humanoids. Once you've killed a Lander, scoop up the Humanoid and return him to the Earth for extra points. You earn 500 points for saving a Humanoid, and an extra 500 for returning the Humanoid to Earth. You also get the points for killing the Lander.

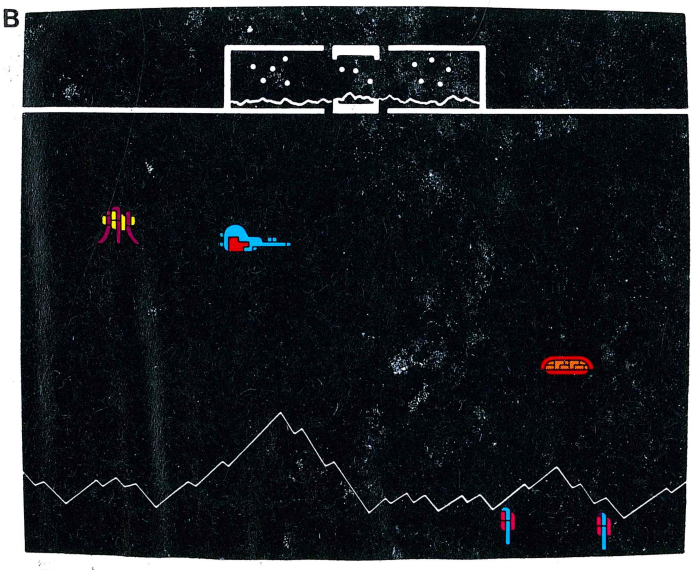
B. Reverse Strategy. Reverse Strategy begins on the second screen. It should be used sparingly, and only when necessary. The most advantageous Reverse Strategy concerns the Mutants. Mutants are dangerous and difficult to kill. They also track your every move. A good way to kill them is to move up toward a Mutant, reverse, and destroy it instantly. Your reversal will confuse the Mutant and stall him for an instant.

A

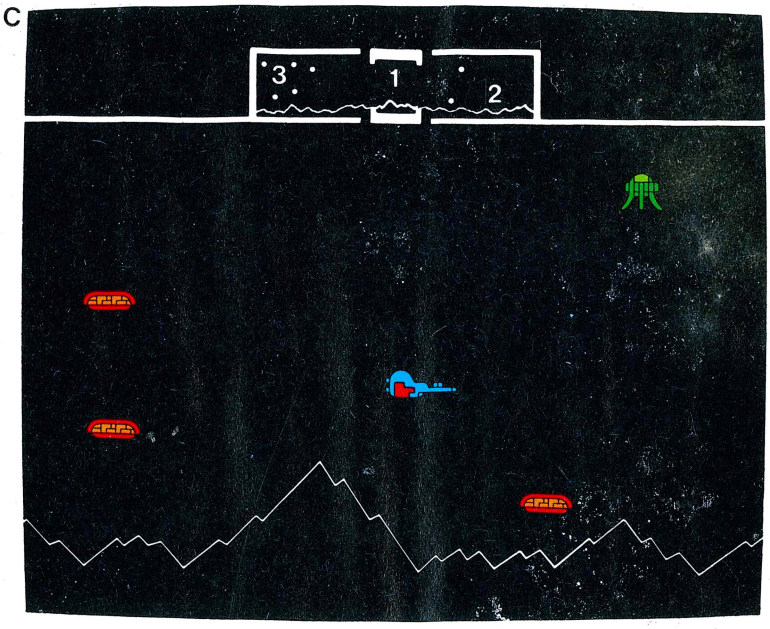




B



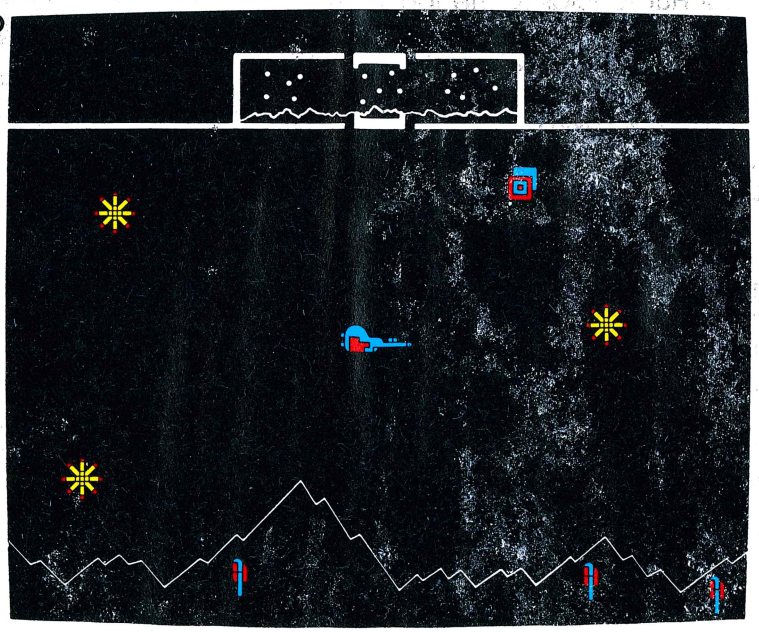
C



C. Hyperspace Strategy. Hyperspace becomes necessary when the score starts building, say around 30,000 points. If you've dawdled during an attack wave, several Baiters may appear. These Baiters are faster moving and faster shooting then you are. There's no need to waste a valuable Smart Bomb on them. You might as well escape them with Hyperspace. Just beware: You have no idea where you'll end up. Be prepared to move instantly as soon as you've reappeared on the screen. Point 1 on the Radar Screen shows where you might be before Hyperspace. Point 2 shows where you might wind up safely. Point 3 shows where you might wind up — and die.

D. Smart Bomb Strategy. Smart Bombs are valuable. Use them for maximum point potential. You should be able to survive without the Smart Bombs until around 30,000 points, at which point you'll have six of them. Wait until several Mother Ships appear on the screen at the same time. Then Smart Bomb the whole screen for 1,000 points per Mother Ship. The only other time to use the Smart Bomb is when you have no other choice. It's best to use the Smart Bomb smartly.

D



TESTIMONIALS

Steve, age 18: Mount Prospect, IL. "I always stay within an inch or two of the bottom. Don't go to the top for points. It's easier to recapture kidnapped Humanoids or shoot Mutants near the surface. When you start getting greedy is when you blow it."

Ron Crouse, Marketing Director, Williams Electronics: Chicago, IL. "Basically, what you've got to do with Defender is to learn the personalities of each of the enemies, so that you know how to best handle them."

Atari's new Defender cartridge is one way to bring kidnapping Landers, ravenous Mutants, and colorful Humanoids into the privacy of your own home.

Defender AT HOME

The spring of 1982 is the target date for several versions of home Defender. Williams — the manufacturer of the arcade game — has finally granted a license to several home-video firms. We haven't actually handled any of these games: they're still being jealously guarded by the manufacturers. But the signs are good that Defender will be given just treatment in the home.

Entex is soon to market a new home video-game system, Adventure Vision. The system will be self-contained with controls and TV monitor. You will not have to hook the system up to your own TV. To introduce this new concept, Entex will package each system with the DEFENDER cartridge. Entex has obtained a license from Williams. According to our information, this Entex game will remain true to the arcade concept. You'll have use of both Hyperspace and Smart Bombs. This is one challenging game to adapt for the home. Perhaps the new Adventure Vision will be the perfect medium.

Atari has also been granted a license from Williams, and will release their DEFENDER cartridge in June of 1982.

Defender (Williams Electronics)

Bonus:	Extra ship every 10,000 points, *ad infinitum.*
Popularity:	Approximately 55,000 machines in existence to date. Average machine still brings in approximately $193.00 per week as of April 1, 1982.
Location:	Does not do well at street locations. Expert skills are best developed at the arcades, where it does exceptionally well.
Enemies:	Primary enemies are the alien Landers. Additional enemies include Mutants, Baiters, Mother Ships, and Swarmers.
Approachability:	Video display instructions helpful, but fast action and complicated controls waste initial quarters. Takes a good amount of time to learn the machine.
Sex Appeal:	95% male, 5% female — like our space program.
Age Appeal:	Fantasy role of Starship pilot appeals to the youngest of players. Depth of skills required appeals to an older crowd. Medium age: 19 years.
Control Comfort:	Complicated control panel is tough to master. Control functions not evident. Defender Fingers must be developed.
Skill *vs.* Strategy:	Mastery of controls and knowledge of your enemies are vital. Skill is, therefore, 90% of the game, although simple overall strategies will be required.
Clocked Or Not:	Not
Special Effects:	Excellent. 256 different color combinations are possible. Constant fireworks. Good sensation of actual space flight.
Value For Money:	Very difficult to jump into. Your first few quarters may be totally wasted. Once you master the skills and understand the capabilities of your opponents, eternal replacement ships will stretch your quarters indefinitely.
Pros:	Graphics; complex control capabilities; promotes prime video skills.
Cons:	Difficult to learn (impossible for some); lengthy training period.

Donkey Kong

Something got lost in the translation. According to Nintendo of America, the word "Donkey" is an English translation of the Japanese word "Stupid." Thus, the game we know as "Donkey Kong" is known throughout Japan as "Stupid Kong." It could have been worse.

Donkey Kong or Stupid Kong—whatever name you choose to use—is, at the time of this printing, the Number One money-making game in the country. And there's no sign that Donkey Kong has peaked in popularity. It's still climbing, so to speak, to that high perch where Asteroids, Defender, and Pac-Man once stood. If you were to put all your money down on the next video sensation, you couldn't do better than to put all that money on Donkey Kong.

What's all the fuss about? Most people will talk about the fantastic animation, with Donkey Kong beating his chest and grabbing a girl and dragging her to the top of a building. There are wild sound effects, too. These two elements—animation and sound—might force a few quarters out of your pocket and into the machine. But to keep pumping quarters in Donkey Kong, there must be something else, a bigger payoff. And there is.

Donkey Kong—a new-wave video game—gives you four totally different games for your quarter. Depending on how high you get, you'll have to contend with Ramps, Foxfires, Elevators, Conveyor Belts, Springese, Barrels, Beams, and, of course, Kong. There's the immediate challenge, therefore, to rise higher and higher in the building, to master all four games of play.

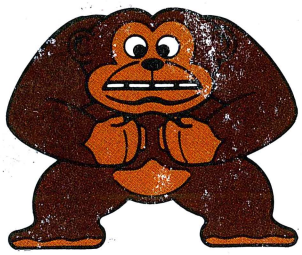
Donkey Kong requires both skill and strategy. You must become adept at moving, jumping, and hammering with Jumpman and you must plan carefully your path toward the top. This is the first game we know of to successfully wed these two video elements. It takes at least a month to simply get good on this machine. You'll then spend another year or so having fun at it (none of us are close to getting tired of it).

The object of Donkey Kong is simple. A building is under construction. Kong grabs a fair-haired Damsel and drags her up to the top of a construction level. You—Mario, the Brave Carpenter—hear the Damsel's cries for help and transform yourself into Jumpman: her potential hero. Your mission, for the remainder of your quarter, is to try to save the girl. The problem is, every time you get to the top of the level, Kong grabs your honey and carries her up to another level. The four different levels are the four different games you must learn to play.

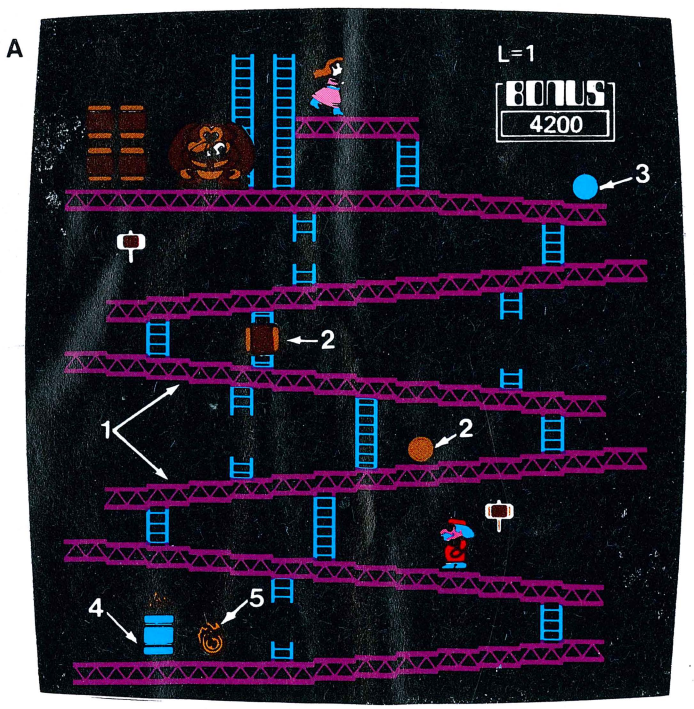
Screen sequence: The order of the screens eventually becomes repetitive. It takes a long time to get there, however. The sequence of the screens is this, with Ramps being A, Ziggurats B, Elevators C, and Conveyor Belts D:

A • B • A • C • B • A • D
C • B • A • D • A • C • B
A • D • A • C • A • B
A • D • A • C • A • B
A • D • A • C • A • B

Read carefully. The tips on these next five pages will help you immeasurably in achieving high scores. If followed faithfully, you'll surely get to the point where you can master the four different screens. Just keep in mind those two endearing words that all distressed Damsels voice when saved from giant gorillas: My Hero!

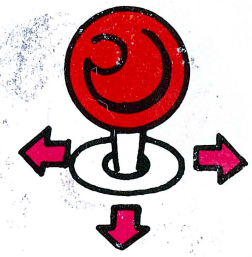


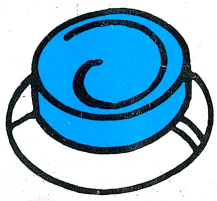
Some elements remain basically the same on every screen. These are the most crucial to learn. Among them are:
***Jumpman** (Mario, the Brave Carpenter): This is you. Spend your first ten or fifteen quarters mastering Jumpman. Don't worry about your score. Learn how to climb Ladders and jump Barrels with ease. Once these two basics are learned, real strategy can begin.*
***Donkey Kong:** Don't worry about Kong. Just don't go near him, or you're dead. You're only concern is with the weapons he hurls at you.*
***Damsel:** She's the goal, the one with the magical kiss. Spend your time trying to reach her, but ignore her cries for help; they'll only distract you.*
***Hammer:** The Hammer appears on screens A, B, and D. Spend some time learning how to use it. It's your only way to kill enemies (Barrels, Foxfires, etc.). Remember: (1) You must jump straight up to grab the Hammer and (2) Don't move when killing enemies. You can move toward them with the Hammer, but not too close. Let them run into your weapon.*
***Ladder:** It is essential to climb Ladders to reach the top of*



ELEMENTS

A. The Ramp Pattern
The Ramp Pattern appears three times before you reach the first Conveyor Belt. Each time it appears, the pace quickens. It's probably the most important pattern to master. The basics are simple: Run up the Ramps and claim the Damsel.
1. The Ramps. You can run up or down the Ramps. Barrels and Beams always roll down. The Fireball, which originates in the furnace, usually moves up.
2. Barrels. Barrels are usually rolling down Ramps. At times, however, they can turn on their sides and plummet down or across Ladders. You can jump rolling Barrels. Barrels turned on their sides will kill you quickly. Avoid them! Some Barrels will track and kill you, especially if you're under or on a Ladder.
3. Beams. These are blue. They act similarly to Barrels.
4. Furnace. (Oil Can or Fire-Pit). Ignore this. All it does is produce the Fireball.
5. Fireball. If you're quick enough, you can ignore the Fireball. It only enters your game if you delay or run backwards. Then watch out. It burns.





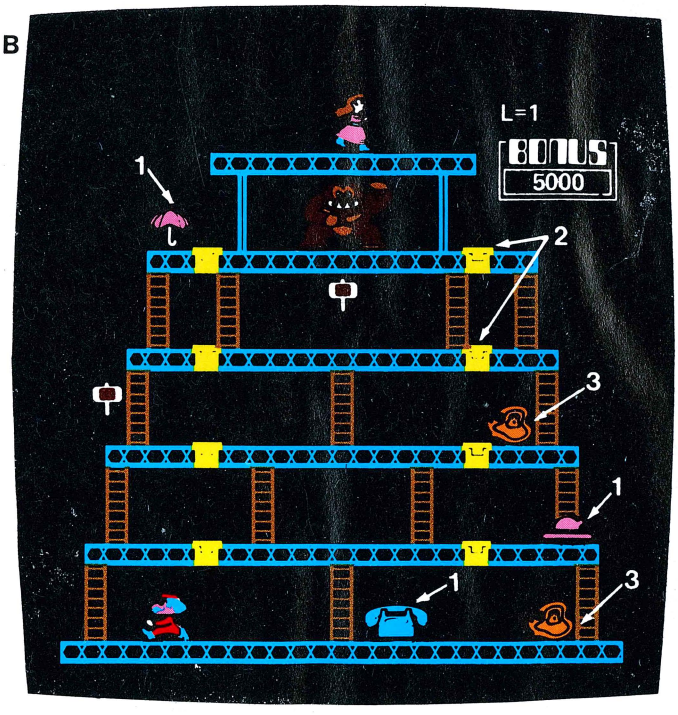
the screen. You cannot jump on to or off of a Ladder. You can't climb up or down broken Ladders. You must completely climb a Ladder before you can proceed. It is important that you learn to climb up and down Ladders swiftly. Whatever you do, don't stand under a Ladder: the enemies will find you and attack.

Bonus: *The Bonus serves two purposes. It (1) gives you extra points when you clear a screen and (2) serves as a time clock. The Bonus will count down progressively as you attempt to clear the screen. You collect whatever is left of the Bonus when you clear the screen. If it counts down to 000, you're dead.*

Joy Stick. *This control will move Jumpman left or right. It can also move him up and down Ladders. It's super important to control the Joy Stick smoothly, so that hesitation is minimized.*

Jump Button. *This button allows Jumpman to jump at will. Time your jumps accurately. If you jump while running, the jump will push you forward. If standing still, the jump will simply push you up.*

B



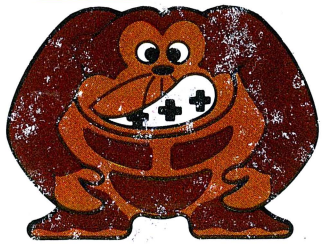
B. The Ziggurat Pattern

The Ziggurat Pattern, similar in shape to a Devo hat, appears twice before the first Conveyor Belt. Again, the basics are simple: You must clear all the Plugs (Rivets?) to save the Damsel. Once the Plugs or Rivets are eliminated, the structure collapses and Kong comes crashing down head-first. Timing is more important than speed. You don't necessarily work from bottom to top.

1. Prizes *(Telephone, Lunch Pail, Umbrella).* Prizes are nice and earn you some bonus points. Claim them only when its practical. Don't go out of your way to get them. When you master the Ziggurat pattern, you'll probably be able to claim all the Prizes without wasting time.

2. Plugs *(Rivets).* You must unplug all eight of these to clear the screen. Walk or jump over a Plug to clear it. Once cleared, you must jump over the gap it leaves.

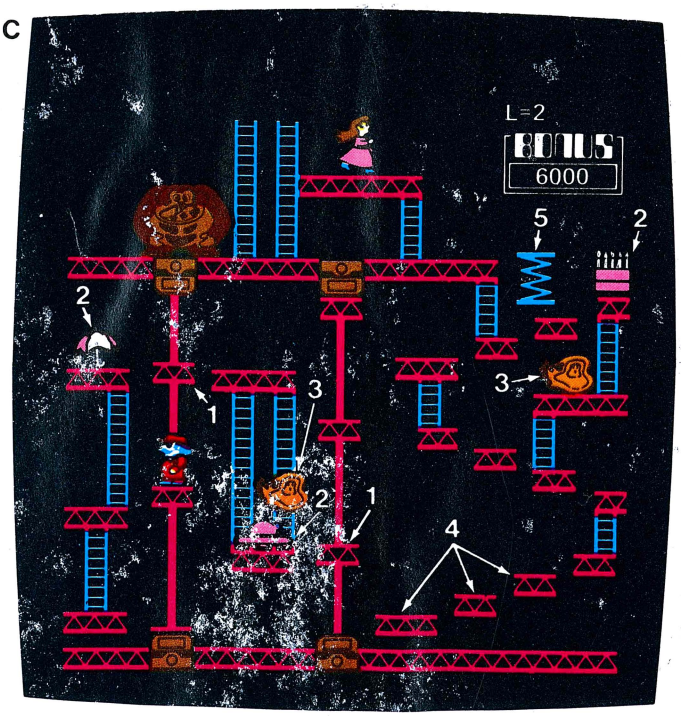
3. Foxfires *(Will-O'-The-Wisps, Flaming Chickens).* These are great balls of fire that are deceptively slow. They're very clever. Like the Pac-Man monsters, they track you. And you can lure them toward you. They cannot cross unplugged gaps. They can, however, slide down ladders — and faster than you can climb down them.



Some elements remain basically the same on every screen. These are the most crucial to learn. Among them are:
Jumpman *(Mario, the Brave Carpenter): This is you. Spend your first ten or fifteen quarters mastering Jumpman. Don't worry about your score. Learn how to climb Ladders and jump Barrels with ease. Once these two basics are learned, real strategy can begin.*
Donkey Kong: *Don't worry about Kong. Just don't go near him, or you're dead. You're only concern is with the weapons he hurls at you.*

Damsel: *She's the goal, the one with the magical kiss. Spend your time trying to reach her, but ignore her cries for help; they'll only distract you.*
Hammer: *The Hammer appears on screens A, B, and D. Spend some time learning how to use it. It's your only way to kill enemies (Barrels, Foxfires, etc.). Remember: (1) You must jump straight up to grab the Hammer and (2) Don't move when killing enemies. You can move toward them with the Hammer, but not too close. Let them run into your weapon.*
Ladder: *It is essential to climb Ladders to reach the top of*

C



C. The Elevator Pattern

The Elevator Pattern appears once before the Conveyor Belts. Your objective is: Get to the Damsel's platform at the top. Speed is a top consideration to get your Bonus points. Watch out, though. You're your own worst enemy on this screen. You must learn how to jump safely from object to object—some of which are moving.

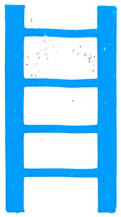
1. Elevators. These move at a constant speed, up and down, as shown. Jump on "up" Elevators when they're about an inch below you. Jump on "down" Elevators when they're an inch above.

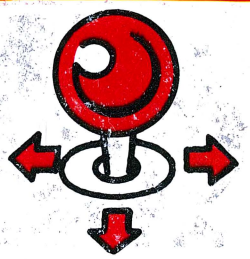
2. Prizes. Get them only if it's practical. Otherwise, ignore them.

3. Foxfires. Constantly monitor where the Foxfires are. Good strategy means avoiding them.

4. Steps. You must learn to jump up the Steps. This takes a certain amount of skill. Practice. Under Strategy, you'll learn the safe Steps and the dangerous Steps.

5. Springese. These can kill you fast if you're sloppy. Always be aware of them. They only attack certain Steps, and they follow rigid patterns.





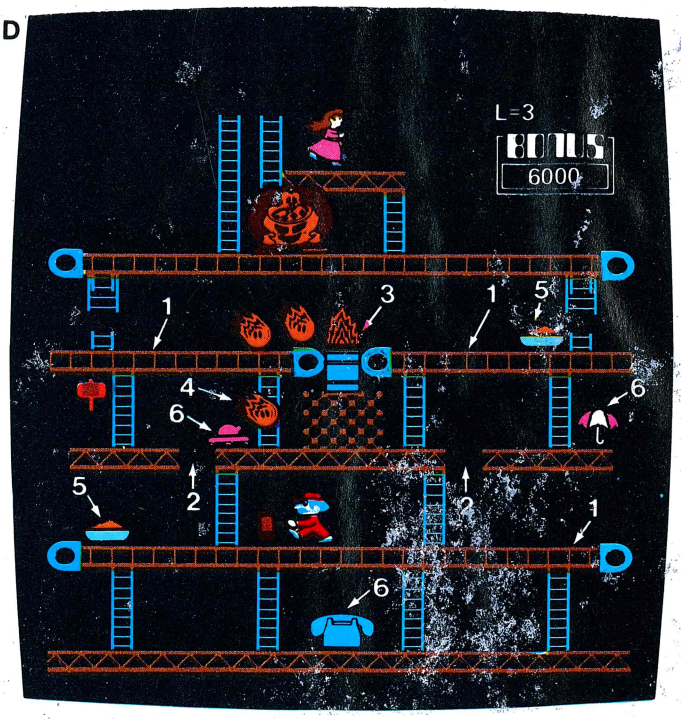
the screen. You cannot jump on to or off of a Ladder. You can't climb up or down broken Ladders. You must completely climb a Ladder before you can proceed. It is important that you learn to climb up and down Ladders swiftly. Whatever you do, don't stand under a Ladder: the enemies will find you and attack.

***Bonus:** The Bonus serves two purposes. It (1) gives you extra points when you clear a screen and (2) serves as a time clock. The Bonus will count down progressively as you attempt to clear the screen. You collect whatever is left of the Bonus when you clear the screen. If it counts down to 000, you're dead.*

***Joy Stick.** This control will move Jumpman left or right. It can also move him up and down Ladders. It's super important to control the Joy Stick smoothly, so that hesitation is minimized.*

***Jump Button.** This button allows Jumpman to jump at will. Time your jumps accurately. If you jump while running, the jump will push you forward. If standing still, the jump will simply push you up.*

D



D. The Conveyor Belt Pattern

This is the fourth and final screen you'll witness in the first sequence. If mastered, you'll play a new sequence of screens. Your object is to get to the top. Conveyor Belts are a big obstacle, as are Foxfires. Good Hammer skills are essential.

1. Conveyor Belts. The Belts can move either left or right, as determined by Kong's direction at the top. If you run against them, your time is slowed down. If you run with them, you run twice as fast. Both ways can be advantageous and should be mastered.

2. Gaps. Gaps must be crossed with a running jump. Do not cross casually. You'll die.

3. Furnace. Avoid it.

4. Fireballs. These balls-of-fire are aggressive, and a leading cause of death. They too must contend with the Conveyor Belt speed and cannot cross gaps.

5. Cement Tubs. You can jump the Tubs. If you contact them, you're dead. They give good Bonus points when hit with the Hammer.

6. Prizes. Get the Prizes only when practical. Don't run out of your way to grab them.

STRATEGY

A. The Ramp Pattern

This pattern appears three times before the first Conveyor Belt. The basic path to follow at all times is drawn. The individual techniques for safely following that path are given below.

Level One:

This is the easiest of the three levels. Specifically:

Point 3. Run as fast as you can to this point. A Barrel will be rolling at you. Jump it. If you've hesitated at all, wait at Point 2 for that Barrel to pass over you. Then resume the pattern.

Point 4. Wait between these two Ladders, jumping Barrels as necessary until it's safe to climb up the Ladder on the far left.

Point 7. Run at top speed from Point 5 to Point 7, jumping Barrels on the run. If you've lagged previously, stop at Point 6, wait for Barrels to pass over you, then move up the Ladder to Point 7.

Level Two:

The game speeds up. Specifically:

Point 2. Run without hesitation to this point. If fast, you can outrun Kong's first Barrel. A second Barrel will come down the Ladder toward you. Jump the Barrel. Hesitate after jumping the Barrel if a third Barrel is passing over you. Then resume the pattern.

Point 4. Wait between these Ladders, as before, until it's safe to climb to Point 5.

Point 5. Wait under the Hammer for Barrels. When the first Barrel comes, jump it and grab the Hammer at the same time. Then move cautiously toward Point 6, stopping to kill Barrels. *Do not kill Barrels while moving.*

Point 6. Wait here until your Hammer runs out. A Barrel will probably be close to you when the Hammer runs out. Be careful. Avoid or jump it, as necessary. Then proceed to Point 7.

Level Three

The fastest Ramp pattern. Specifically:

Point 1. Come to this point and wait. You won't be able to outrun Kong's first Barrel this time. Once the Barrel hits the bottom Ramp and rolls toward you, jump it. Resume the pattern after jumping.

Point 4. Follow the same play action as described from Point 4 above.

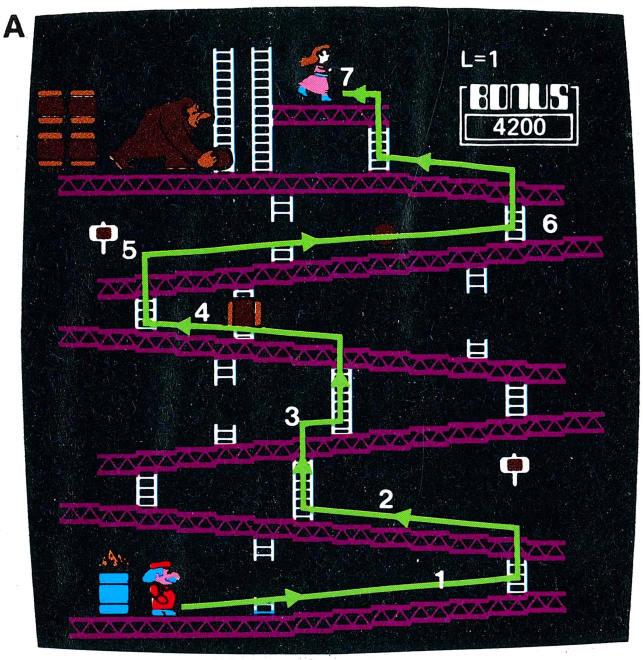
B. The Ziggurat Pattern

This pattern appears twice before the first Conveyor Belt. You must clear all the Plugs (or Rivets) to collapse the structure and make Kong fall on his head. Foxfires will track you closely. The patterns below are *guides.* Considering the nature of the computer chip, you may have to change patterns in the middle. Three things to remember: (1) Don't concern yourself with the Prizes. If you're there, grab them. Otherwise, ignore them. (2) You can't cross an unplugged gap. You must jump. And the Foxfires can't jump unplugged gaps. (3) Foxfires always enter on the opposite side of Jumpman. If you're on the left, they'll enter on the right.

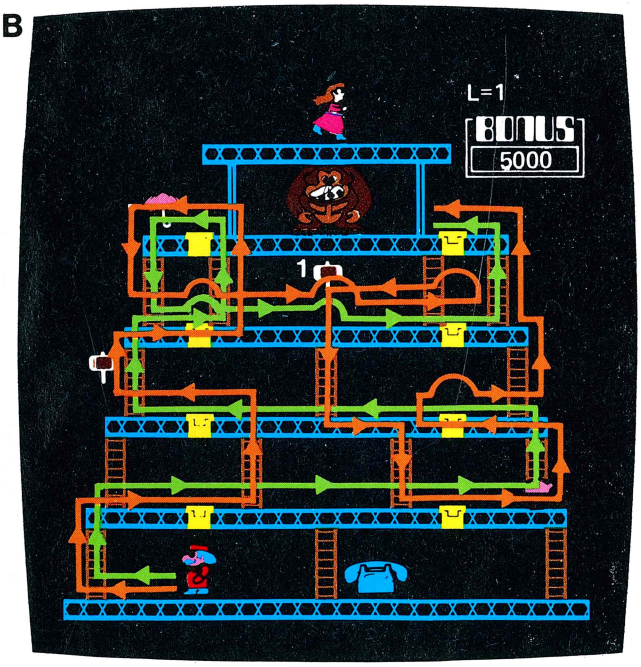
Orange Pattern: Follow this pattern if the Foxfire enters on the bottom row. If you run without hesitation, you'll be able to grab the Hammer when the Foxfires get near the top. At Point 1, grab the Hammer and kill as many Foxfires as possible. After killing them, it should be safe to resume the pattern and get the Plugs.

Green Pattern: If a Foxfire enters from the third row,

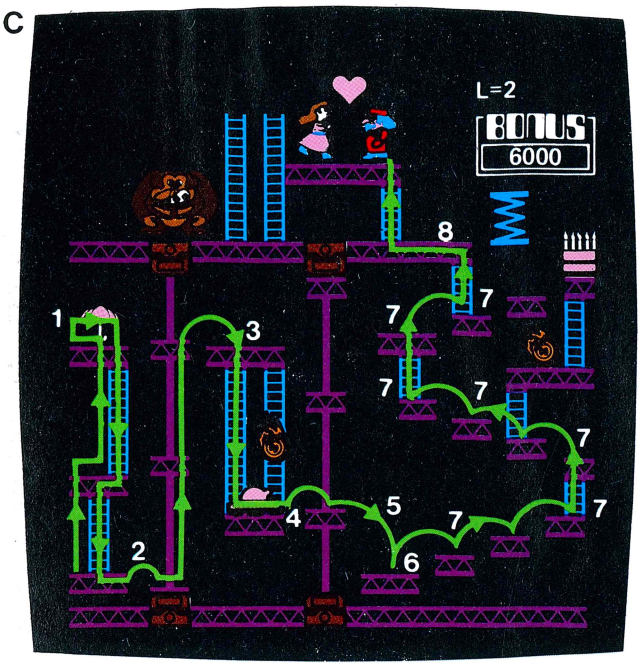
A



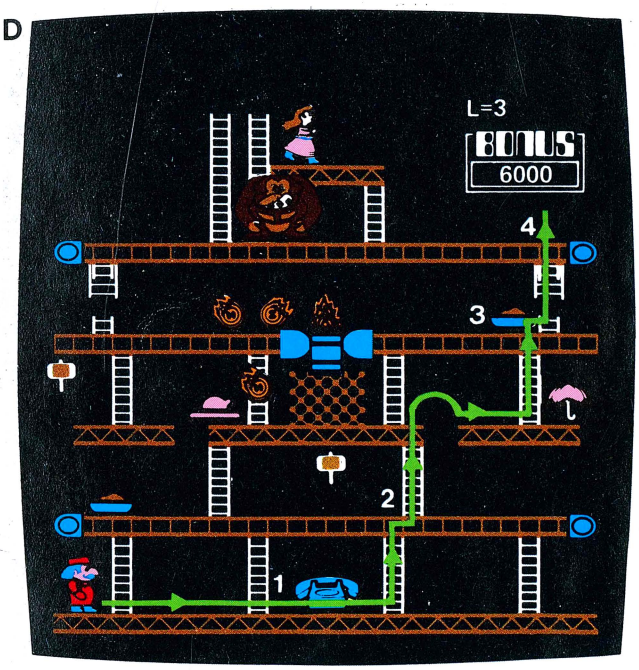
B



C



D



you'll have to clear one side at a time. This is a more difficult process. By the time you make it to Point 2, the Foxfires should be at the top floors. Slip down the Ladders, pluck out the bottom Plugs, and hightail it back to the Hammer at Point 2. Claim the Hammer, pound senseless a few Foxfires, and grab your last Plugs.

C. The Elevator Pattern

This pattern appears only once before the first Conveyor Belt. Jumping skills are super important here. Once you learn how to jump effectively, follow this basic pattern. A quick trip through the Elevators will then be easy.

Point 1. Run up and grab the Prize and then return down. This ploy confuses the Foxfire at Point 3.

Point 2. Wait here until the Foxfire commits itself down one of the Ladders. Then jump on an Elevator. Make sure the Step you jump on is at least an inch below you when you jump.

Point 3. Jump on top of this landing. Go down the Ladder the Foxfire isn't on.

Points 4, 5, 6. Grab the Lunch Pail and plan a quick jump from the landing (4) to the "down" Elevator (5), to the Steps (6). This must be done quickly, without hesitation. The Elevator should be an inch above you when you jump.

Point 7. All the steps marked seven (7) are safe: you can stand there without fear of a Springese. The trick for moving over an unsafe Step is to wait until a Springese goes by and then move it, as fast as possible. It should be fairly easy to move up the Steps, as shown. Just watch out for the Foxfire.

Point 8. When you reach this point, stand still. Don't be afraid. Springese will jump over you. Plan your move to the top once a Springese has jumped over you.

D. The Conveyor Belt Pattern

The Conveyor Belt is a difficult pattern to master. Your major obstacle is movement: You must learn how to run against the grain, so to speak. If you run in the direction that a Conveyor Belt is moving, you go twice as fast. If you run against a Conveyor Belt's direction, your progress is twice as slow. The pattern below is a simple guide. It's most important to get to the top quickly, for two good reasons (1) your bonus will be higher and (2) more Foxfires are released as your Bonus score diminishes. One important tip: Unlike the Ziggurat Pattern, Foxfires enter, this time, on the side Jumpman is on.

Point 1. Move to this point and stop. Do not grab the Telephone. Wait for all the Foxfires to come out on the left-hand side of the screen (three on L=3; four on L=4; five on L=6). Once they've entered, resume the pattern, grabbing the phone.

Point 2. Make sure a Foxfire isn't coming down the Ladder. If it is, you'll have to get the Hammer and kill it. If it isn't, don't worry about the Hammer.

Point 3. When you reach this point, you'll probably have to jump a Cement Tub or two. You can do it. Although you move forward slowly on this Conveyor Belt, you can still jump as far. Plan a jump that will place you at the bottom of the Ladder.

Point 4. Get on a Ladder and climb it to the top. Prepare for a new screen.

TESTIMONIALS

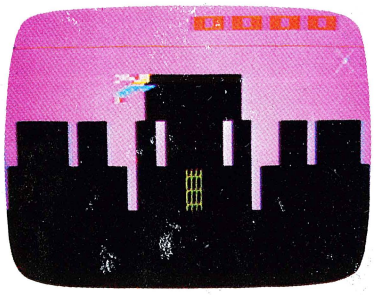
Hagy, age 25: Boston, MA. "You can usually get the Foxfires to run from you. The trick is to run at them at full speed and back up at the last second. Foxfires are nothing more than flaming chickens."

Scott, age 23, Carbondale, IL. "When you get real good on the Elevators, you'll find the bottom Steps to be a waste of time. I always jump from the top of the platform to the middle Step and zip right up."

Donkey Kong AT HOME

Surprise! A home version of Donkey-Kong will soon be available. It's being marketed some time before Christmas, 1982. Coleco, under license from Nintendo—manufacturers of the arcade Donkey Kong—will produce home Donkey Kong cartridges for both the Atari and Intellivision systems. We don't expect these to play very much like the arcade version. The combination of four different playing screens with a numerous assortment of obstacles and enemies is too much to ask of a home game. But Coleco will no doubt give it their best shot.

If you enjoy the animation of the game, and can't wait until Christmas, there are several animated home games available. One that offers the additional bonus of role-playing is



Superman, by Atari, is one of few home games that allows role-playing. Instead of Jump-Man, you're Superman trying to save Lois Lane.

SUPERMAN, by Atari. Like Donkey Kong, you have the problem of saving a damsel, in this case Lois Lane, from the clutches of an arch-villain, Lex Luthor. Until the Atari Video System X is available, however, you will have to be content with Atari's computer-like animation. Unfortunately, it's no comparison to the animation of Donkey Kong.

Activision's quality animation allows easy access to role playing in several of their games. Be a cowboy in STAMPEDE, or a biplane pilot in BARNSTORMING. Activision's best games are often sports-oriented. SKIING and BOXING are good. ICE HOCKEY and TENNIS are reported to be superb.

Donkey Kong (Nintendo of America)

Bonus:	Extra Jumpman after 7,000, 10,000, or 12,000 points, as determined by the owner.
Popularity:	Approximately 35,000 machines in existence to date. Average machine brings in approximately $260.00 per week as of April 1, 1982.
Location:	Does well in both street and arcade locations.
Enemies:	Depends on screen. Kong is a constant enemy. Others, by screen, are: (1) Barrels, Beams, Fireball (2) Foxfires (3) Foxfires, Springese (4) Foxfires, Concrete tubs.
Approachability:	Few on-machine instructions. Difficult to properly manipulate Jumpman, at first. Early quarter loss to be expected.
Sex Appeal:	50% male, 50% female.
Age Appeal:	Clever animation draws children of all ages.
Control Comfort:	Lefthanded joystick and a single jump-button produce moderate discomfort.
Skill vs. Strategy:	Once skills are mastered, it becomes a game of high strategy.
Clocked Or Not:	Bonus points count down. The faster you reach the top, the more bonus points you receive. If points run out, you're dead.
Special Effects:	Excellent animation and sound promotes easy entry into role playing.
Value For Money:	Average first quarter yields one minute playing time. Playing time increases rapidly with practice.
Pros:	Four distinct games in one; excellent animation; potentially long playing time; exceptional transition time.
Cons:	Long introductory graphics frustrate experts.

Omega Race

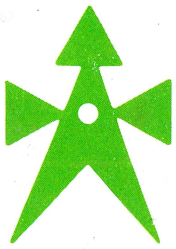
it's probably the most approachable video game in the arcades. An unskilled player can pop one quarter into the machine and stay there for up to 20,000 points. That doesn't mean it's a simple game. It simply means that you get more time for your initial quarters (you get your money's worth!).

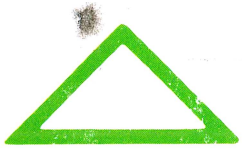
Omega Race remains pure. While more and more games are offering Disney-like animation and over 200 different colors, Omega Race displays simple black-and-white shapes. So what's the big deal? Why is Omega Race a constant top-10 money maker? It's the feeling, my friend—the magical weightless feeling you get on this journey through outer space.

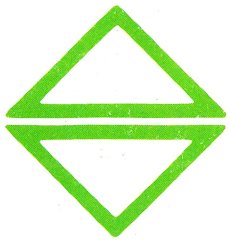
Omega Race comes in many shapes and sizes. There are stand-up versions and sit-down versions, like the one on this page (check out the space suit). Some older machines come equipped with a three-dimensional color background. No matter what machine you play, however, the game remains the same.

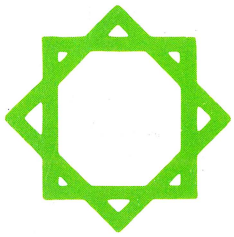
The year is 2003. Android forces are attacking the city of Komar. It is up to Omega Fighters to save the city from this alien attack. The method of fighting is simple. It's a strange space race, where Omega Fighters are trained to run circles around the enemy. The circling confuses the enemies, making them easy targets for your missile fire. Once an alien attack is snuffed out by the Omega Fighter, triumphant music blares, and a new set of aliens—angry now—regroup and attack.

The weightless feeling of Omega Race is indescribable. There are a few basic strategies, although this is primarily an observation and reaction game. If you're sick and tired of getting low scores on Defender or Donkey Kong, try this game for size—and watch the scores build.









Omega Fighter. *This agile ship simulates the feeling of flight with frightening realism. It is controlled by two very touchy controls. The Thrust Button requires a mere tap for sudden bursts of speed, and the Guidance Control Knob can supply immediate 360-degree turns. Laser fire is limited to four shots until one of them makes contact or disintegrates into space.*

Mines *(350 and 500 points). Photon Mines (triangle) are left in the wake of Command Ships. Vapor Mines (double triangle) are usually left by Death Ships. Both types of Mines are only dangerous if you bump into them.*
Droid Ship *(1000 points). Slow-moving Droid Ships are of little concern. They are easy targets that cause few problems.*

ELEMENTS

It is most important to understand the game elements. High scores are the rewards for those with top-notch reflexes, not pre-planned strategies. The elements can be easily learned after a few dollars of play.

A. Omega Fighter. This is you. You have the ability to turn at any angle—full circle if you wish. You move forward by means of a Thrust. Fire-power comes in a series of four shots each. You get new fire-power once your first shots hit an object or disintegrate. It's best to plan your shots wisely. When in doubt, however—fire.

B. Force-Field. The Force-Field is always there, but becomes visible only when you bump into it. The Omega Fighter bounces off the Force-Field like you'd bounce off a giant rubber band. You can take the corners full throttle, therefore, without worry of a crash. Just be prepared to bounce.

C. Photon Mines *(350 points).* These triangular Mines are deposited randomly by Command Ships. More and more of them appear as the game progresses. Don't collide with them! Shoot them!

D. Vapor Mines *(500 points).* Treat Vapor Mines as you would Photon Mines. Just be doubly aware of them. And make sure to destroy them.

E. Droid Ships *(1000 points).* Droid Ships slowly and steadily track you. They can't shoot at you. Droid Ships are easy to kill. And as long as you keep moving, there's no way they'll catch you—just don't run into them! If you kill a Command Ship, one of the Droid Ships will transform itself into the new Command Ship.

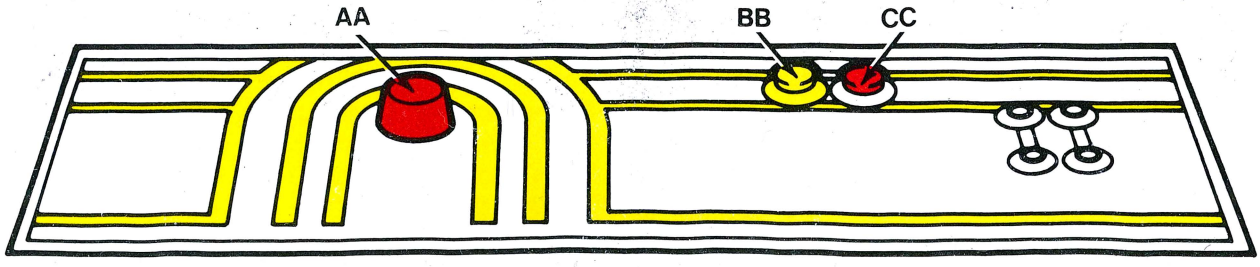
F. Command Ships *(1500 points).* This is one fast adversary. It tracks and shoots much faster than the Droid Ships. Kill Command Ships before they become Death Ships. Chase them. Command Ships warn you of the Death Ship metamorphosis: They start spinning rapidly.

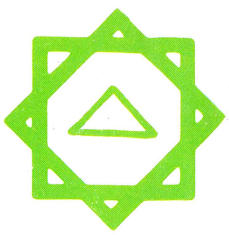
G. Death Ships *(2500 points).* This is hyper-accelerated attack. If a Death Ship appears, you must kill it. But be careful! The Death Ship can shoot and maneuver much faster than you can. Use all of your raceway skills. Death Ships leave plenty of Photon and Vaper Mines. The faster you kill it, the better.

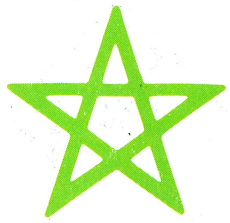
AA. Guidance Control Knob. This rotating knob will move your Fighter in any direction you wish.

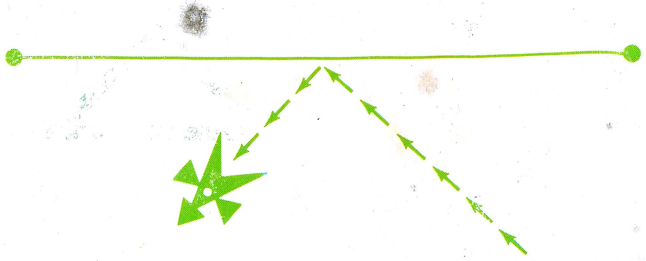
BB. Thrust Button. This moves you forward. A light tap is really all you need for most situations. If you want to travel a good distance, hold the button down. But be careful. It's difficult to control your Fighter at high speeds.

CC. Fire Button. This unleashes deadly laser rays that neutralize and destroy enemy targets. You shoot in a series of four. Plan your shots carefully so that you're never left defenseless.

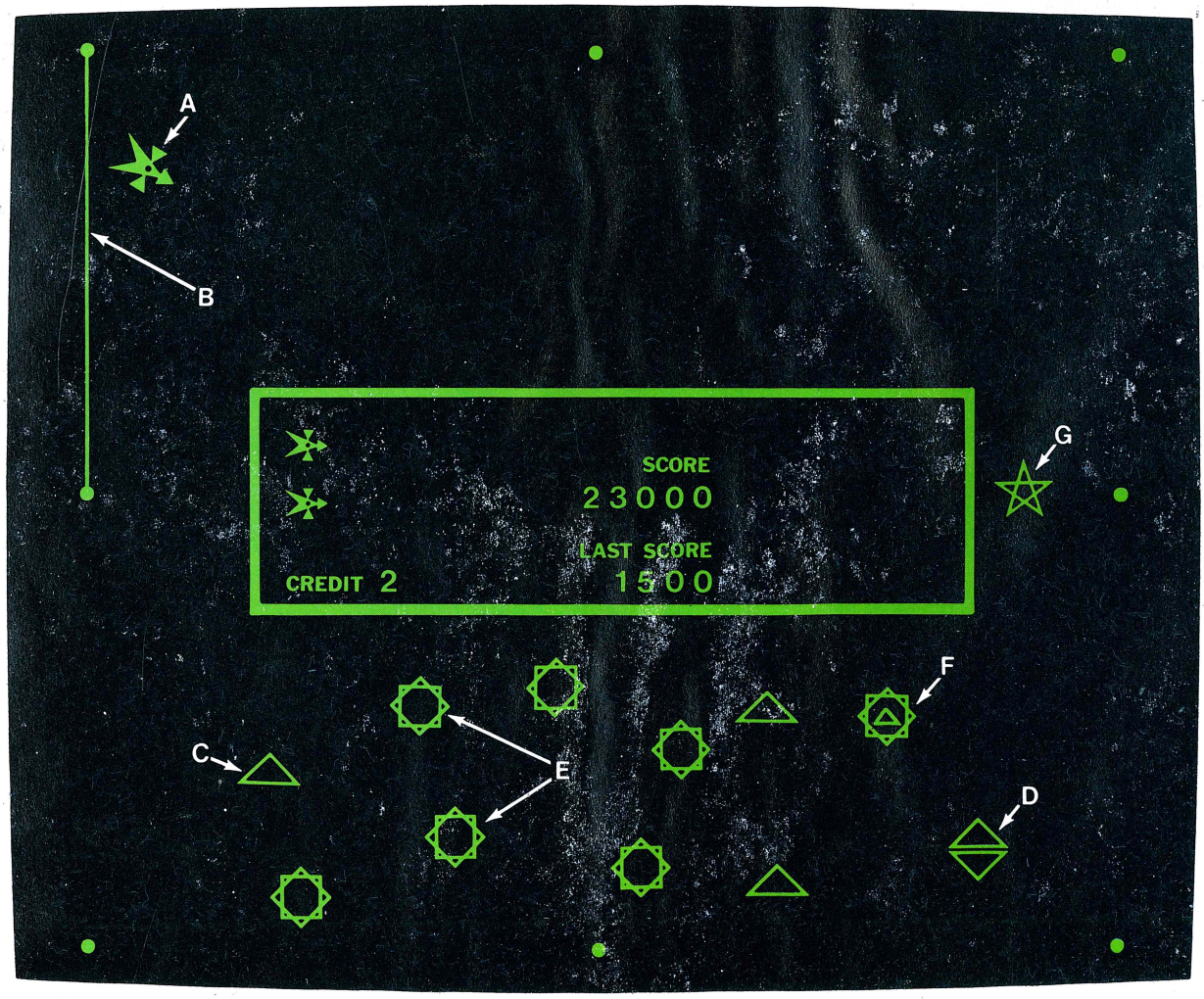




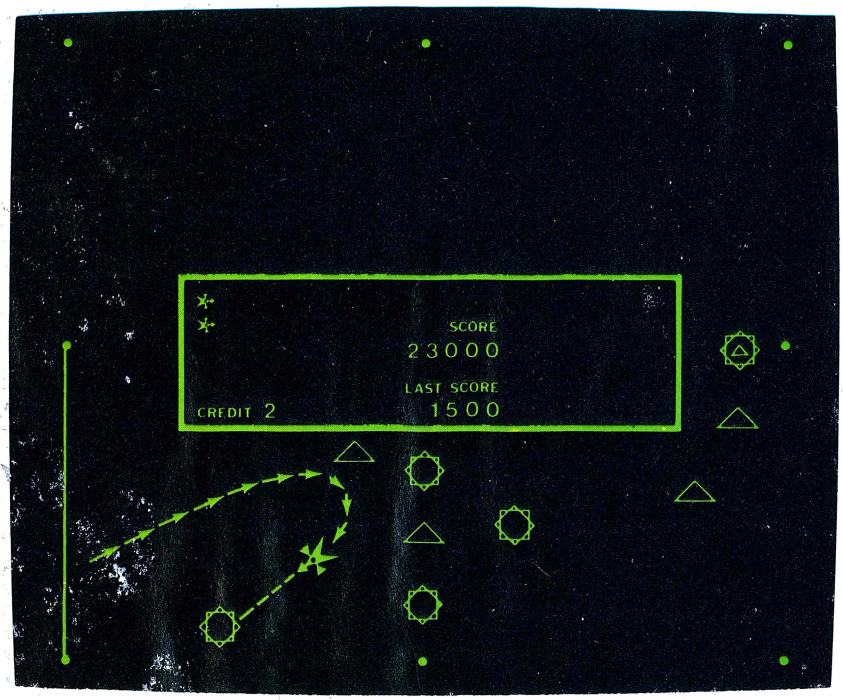




Command Ship *(1500 points). This pair of squares with a Mine in the middle is fast and dangerous. It is capable (and very fond) of tracking and shooting your Omega Fighter. It also leaves Photon Mines behind it. At random intervals, it will begin spinning rapidly and transform into a...*
Death Ship *(2500 points). Two words to remember: Hyperaccelerated attack! This shooting star can out-maneuver an unskilled Omega Fighter. It destroys by colliding with your Ship. It also leaves Mines in its path.*
Force-Field. *Forming the perimeter of the screen, the Force-Field acts like an elastic band. The Omega Fighter can utilize this element of the game like a sling shot for going around corners. The Force-Field becomes visible only when you make contact with it.*



A

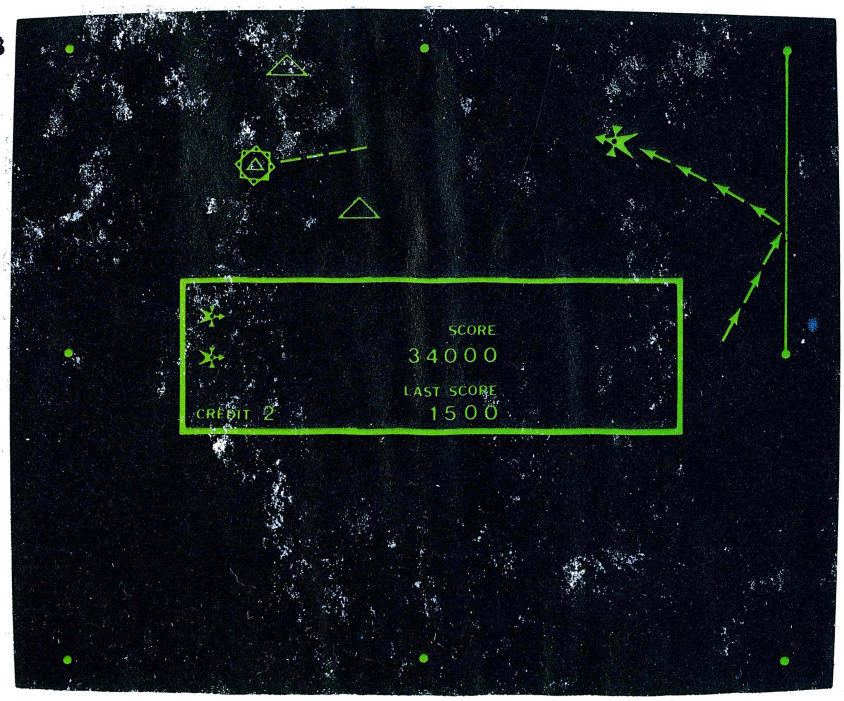


STRATEGY

There are few secret strategies to Omega Race. The most important consideration is to kill enemy Androids fast, before they turn into Death Ships. If you take too much time, you'll be confronted with numerous mine fields and aggressive aliens. You get an extra Fighter and bonus points at a score determined by the arcade owner, usually 40,000 points. Some special tips on how to get that bonus package are given here.

A. Thrust direction is determined by Fighter direction. If you find yourself heading quickly toward enemy Droids, don't panic. Simply turn your ship around and thrust in another direction. You can control your thrusts somewhat by bouncing your Fighter off of Force-Fields. It's important that you be in control of your Fighter at all times.

B



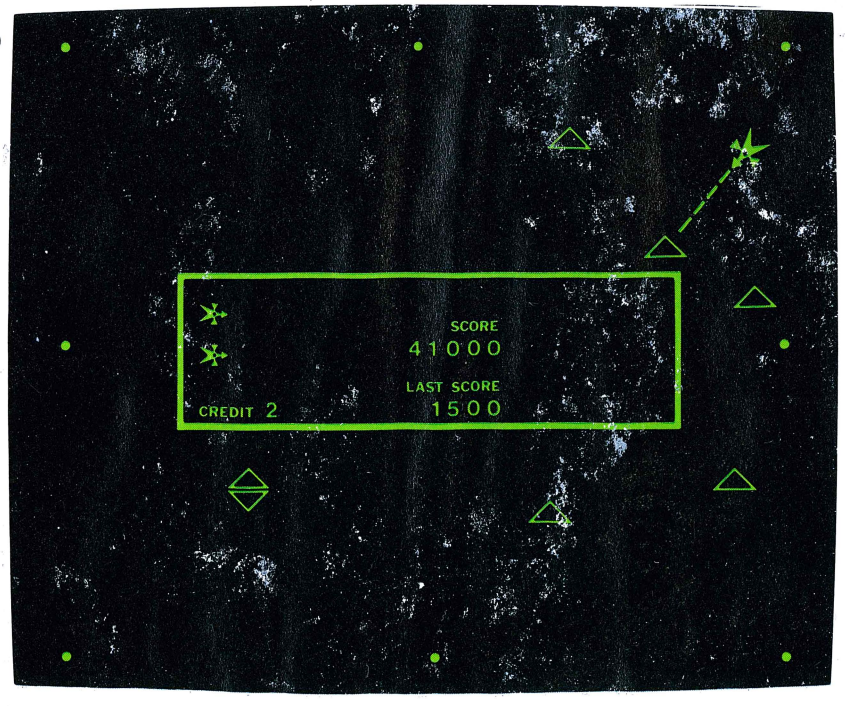
C

B. Keep moving. Remember, you're able to race around the city. You've been trained to do this. It's important that you keep moving in order to baffle and confuse the Androids. Always chase after Command Ships. Kill them before they become Death Ships. Death Ships may be worth more points, but they aren't worth the hassle.

C. Never shoot straight at a Death Ship. Use your powers of movement to run circles around the Death Ship. When you've got a good shot at it, arc your Fighter around the Death Ship, as shown. Then shoot. It's super important that you never shoot straight at a Death Ship. You may in fact destroy it, but it will probably destroy you in the process.

D. Clean up Mines. You always have spare time after an attack wave. Use this spare time to destroy as many Mines as you possibly can. Those Mines are worth points! And if you don't kill them now, they'll sit waiting for you on the next screen.

D



TESTIMONIALS

Tim, age 20: Chicago, IL. "Ambush Command Ships and Death Ships by poking just your nose around a corner of the center box."

Angel, age 17: Chicago, IL. "I never let the Death Ships appear. I work as fast as I can to kill off all the slower Ships."

Josiah, age 33: Bangor, PA. "It's a race. Race across the top, and destroy the first Command Ship. As new Command Ships are created, kill them instantly. The new Command Ship is always the leader of the pack of Droids."

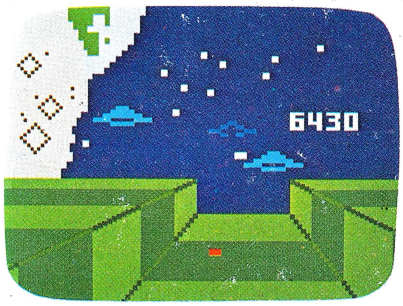
Phil, age 24: Indianapolis, IN. "I live dangerously. I love the challenge of killing Death Ships for top points."

Sydney, age 13: Geneva, NY. "At the beginning of each round, you can fire before you can thrust. Take advantage of it to quickly kill any Mines within range."

Omega Race AT HOME

You can count on it. Omega Race will be available in a home version before 2003. Coleco is reported to be working on a tabletop version of Omega Race. We haven't been allowed to touch it, but it's not likely to duplicate the sound and space-flight sensations — which are important features of the arcade game. However, Coleco will soon market cartridges for both the Atari system and Mattel Intellivision system. Since these will be licensed by Midway (the manufacturers of Omega Race for the arcades), they are likely to be of high quality and perhaps duplicate the sensations of the arcade game.

Since sound plays such a vital role in the Omega Race game, try this: Buy a TV-to-stereo hookup for quality sound.



If you can't wait for the new Omega Race cartridge, we suggest you try out Star Strike, by Intellivision. It's one of the few home space games where you yourself race to kill the enemy.

Omega Race (Midway)

Bonus:	Extra ship awarded, as determined by the owner (usually 40,000).
Popularity:	Approximately 35,000 machines in existence to date. Average machine brings in approximately $181.00 per week as of April 1, 1982.
Location:	Arcades only. Rarely seen at street locations.
Enemies:	Alien Spaceships and Mines with individual levels of aggressiveness. Aliens, from least to most aggressive, are: Droid Ships, Command Ships, Death Ships.
Approachability:	Very approachable, although there are few on-machine instructions. Difficult to master unique Ship movements. First quarters are rewarded with acceptable play time.
Sex Appeal:	90% male, 10% female, as in most shoot-em-up space-war games.
Age Appeal:	Mastering zero-gravity flight control appeals to older pilots. Kids love it, too.
Control Comfort:	Thrust and fire buttons only. Rapid button tapping may cause problems until you're used to it.
Skill *vs.* Strategy:	Overall strategy is really an accumulation of individual basic skills.
Clocked Or Not:	Not timed. Action gets intense if you dawdle, and enemies leave more deadly Mines.
Special Effects:	Black and white game. Clear resolution. Sound effects are quite good.
Value For Money:	Good. Learning to maneuver your Ship is a touch difficult at first, but high scores and long play come quickly.
Pros:	Space simulation; approachability; audio.
Cons:	Bare-bone graphics; repetitious play.

Pac-Man holds the record. Since its development in 1980, approximately 250,000 Pac-Man machines have appeared all over the world. That's a quarter of a million machines! And approximately 95,000 of those are in the United States. In numbers alone, Pac-Man reigns supreme. They have set the marketing goal that all other games strive to achieve.

The basics of Pac-Man are simple. You control one joystick that moves the Pac-Man through a maze—left or right, up or down. The trick is learning standard patterns to guide this Pac-Man through that maze. We offer one simple pattern that can be learned and put to work in a matter of days. This pattern will undoubtedly give you high scores. But you may eventually discover variations in the pattern that work better for you. And that's what Pac-Man's all about! Learn to personalize your pattern, give it your mark.

The object of the game is simple: Score as many points as you can. Eating the small dots in the maze gives you the minimum number of points: 10 points per dot. Big points come when you eat the Energizers—the big flashing dots near each corner of the maze—and then kill the fleeing Blue Monsters. Each Energerizer is worth 50 points. The points for the Monsters double as you eat them during a single blue phase. The first Monster is worth 200 points, the second 400, the third 800, and the fourth 1600. During the first three or four screens of play, it's fairly easy to kill all four Monsters with each Energizer—for a total of 3000 points. If you kill four Monsters at each corner and eat up all the small dots (240 of them), you gather 14,600 points for each screen. If you gobble up a few Fruits on each screen, you add their values to the total. The first Fruits—Cherries—give small bonus points (100 each). Each screen you play gives you different Fruits with increasing point values (Strawberry, 300, and Peaches, 500, for example). You eventually get to high screens where there's no Fruit at all, but bonus Thunderbirds, Bells, and Keys (worth 2000, 3000, and 5000 points, respectively).

Don't get greedy. Bonus Fruits and Prizes are worth more during the later screens, but it becomes harder and harder to eat all four Monsters with each Energizer. Eventually, you must be satisfied with eating only one—or maybe two—Monsters per Energizer. That's because the Monsters stay blue for such a short period of time as the game progresses. Once they return to their original color, they'll kill you.

Pac-Man has been the center of controversy. Many enterprising computer-based businesses have been "ripping off" the Pac-Man idea. Laws are being developed as quickly as possible to ensure the Pac-Man trademark. What all this means is that Pac-Man has gone far beyond most video games. Songs, T-shirts, bumper stickers, ties, coffee mugs, and numerous other "fan" items have recently flooded the market. And all of this for a game that was originally considered "too cute."

Listed above are the bonus Fruits and Prizes, their point values, and characteristics. Fruits serve as landmarks, orienting you to the speed of the screen you're playing. They will appear at the bottom of the screen throughout the game as a record of the number of screens you've cleared. Fruits start with a Cherry and end with a Key (if you're lucky enough to get there). The mark of an expert Pac-Man operator is a long row of Keys at the bottom.

Cherries *(100 points). Cherries are the symbol for screen one, the slowest moving screen.*
Strawberry *(300 points). When you see the Strawberry, you know the game speed is beginning to accelerate. You are now on screen two.*
Peach *(500 points). The Peach appears on screens three and four. The speed is usually the same as on screen two.*
Apple *(700 points). This Fruit appears on screens five and six.*

ELEMENTS

Pac-Man is a game with five basic parts. Get to know these parts before attempting high strategy. Once you master the mechanics of the game, the real fun — and the high scores — will begin.

A. Pac-Man *(alias The Pac, Jaws, Yellow Man, and Critter).* Never hesitate moving the Pac-Man. Hesitation can be a more formidable enemy than the Monsters. Courage is one of four ways to stop hesitation. The other three are practice, practice, and practice. You'll probably experience those painful Pac-Man ailments: Pac-Man elbow and Pac-Man blisters. They're but the price you pay for victory.

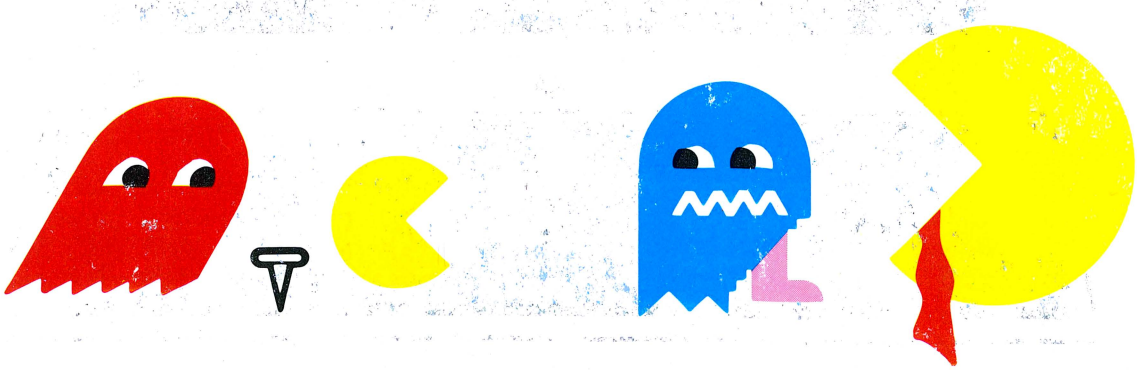
B. Monsters *(alias Ghosts, Zombies, and Screw-Eyes).* Learn the personality of each monster. Speedy, nicknamed "Pinky," is pink, and he's fast. The red Shadow, nicknamed "Blinky," is always behind you; it's hard to shake him. The light blue Bashful, nicknamed "Inky," is terribly shy and will actually run away from you. The orange Pokey, nicknamed "Clyde," will try his best to get you, but he's slow.

C. Energizers *(alias Power Points, Killer Pills, Fuel Tanks, and Vitamins).* Make sure at least three Monsters are following you before eating an Energizer. You only have four Energizers per screen — use them sparingly for maximum point potential. The Energizers are to Pac-Man what spinach is to Popeye. They make Pac-Man powerful enough to kill Monsters.

D. Tunnel *(alias The Tube, The Time Warp, and The Scoot.)* The Monsters always go slower through the Tunnel than Pac-Man. Use this to your advantage: Lure the Monsters behind you through the Tunnel. This is the best way to get the Monsters off your tail. It buys you time.

E. Fruits *(alias Big Points, Point Pickers, and Weiners).* Fruit makes for big bonus points. Try your best to get the Fruit, but remember: the Monsters know you want that Fruit. Lure the Monsters away. The speed of the game varies with the Fruit showing at the bottom of the screen. The progression from slowest to fastest is: Cherries, Strawberry, Peaches, Apples, Grapes, Thunderbirds, Bells, and Keys.

AA. Joystick. This is the only Pac-Man control. It's magic in its simplicity. Although you may realize a few blisters and nagging sores, this one Joystick will maneuver you swiftly through the maze and Tunnels. Our suggestion: Go light. Don't spend so much effort trying to move the Pac-Man.



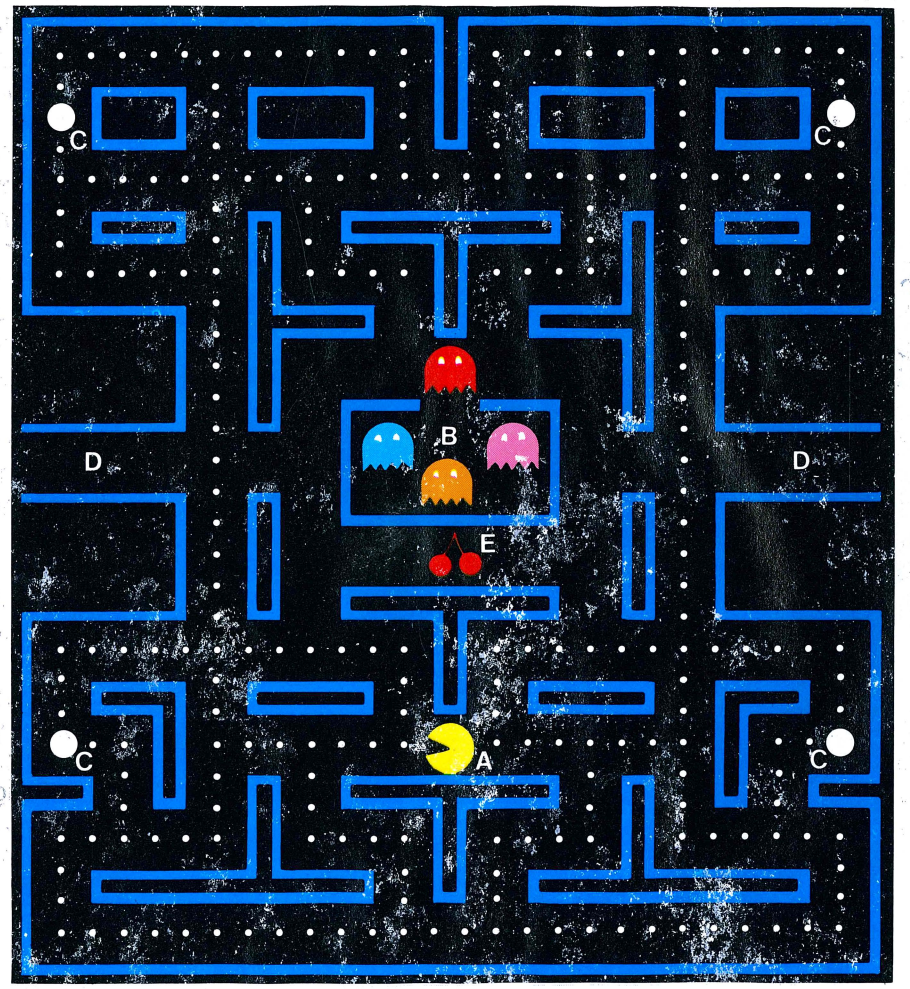
During your fifth screen the speed is pretty fast. The Monsters stay blue for only 2.5 seconds. The second Apple screen (screen six) slows down, and the Monsters stay blue longer.

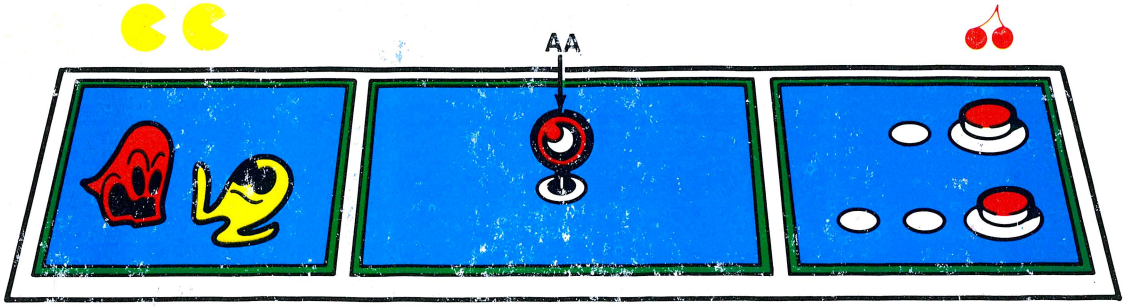
Grapes *(1000 points). The Grapes appear as a bunch during screens seven and eight. Screen seven is fast, and the Monsters stay blue for a short time period. The pace is slower and the Monsters stay blue longer during screen eight.*

Thunderbird *(2000 points). This high-value Prize appears during screens nine and ten. Again, the first time it appears the pace is fast and the Monsters don't stay blue for very long.*

Bells *(3000 points). Bells are the landmarks for screens eleven and twelve. The speed is fast on both screens.*

Keys *(5000 points). Keys appear from the thirteenth screen on, and are the ultimate Pac-Man Prize. They represent the fastest speed as well as the most points.*





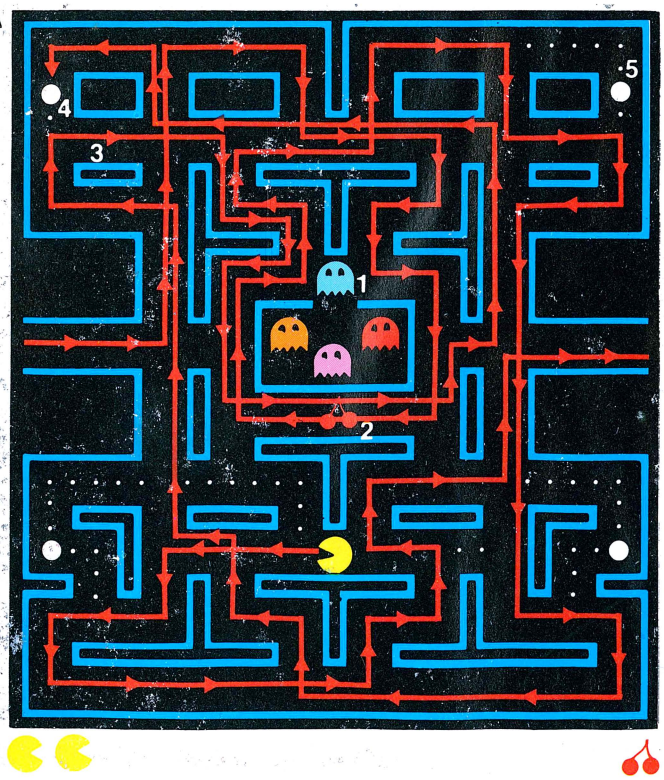
STRATEGY

Don't believe anybody wielding one-pattern Pac-Man methods. Monster chips are programmed to behave differently on different screens. It's true that you can have one *general* pattern, but you must keep altering that pattern for the screen you're playing. We give you here just such a one-pattern method. It is basically the same on every screen. The individual nuances, however, are the difference between high scores and instant death.

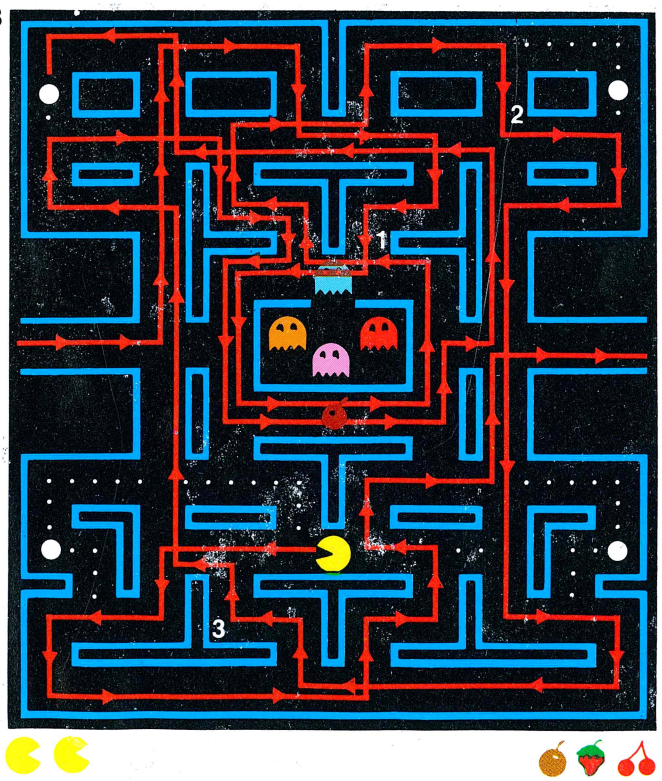
Beware the bootleg Pac-Man. Your high scores have caused arcade owners to jimmy with their Pac-Man machines. They can buy kits to transform standard Pac-Man movements into random movements. Your patterns won't work. Midway itself—the manufacturer of Pac-Man—provides new chips to alter somewhat the movement of the Monsters. Our pattern works with the classic machines. You're on your own with random machines.

A. The Cherry Pattern. The classic Pac-Man program will respond beautifully to this pattern on the first, Cherry Screen. The trick is to follow the leader. This pattern gets the Monsters chasing you, just right for big points at the Energizers. When you get to Point 1, run clockwise around the Monster pen. Follow this to the Fruit at Point 2. Eat it. You'll have lots of Monsters behind you. Quickly duck out of the Monster Pen to avoid the approaching orange Monster. Make your way up to Point 3. Don't eat the Energizer. Return instead to Point 2, pick up a second Cherry, and move to Point 4. Eat the Energizer now and kill Monsters. Your prime motive now should be eating Energizers. Move from the top left to the bottom left, then to the bottom right and finally to the upper right. Eat the final Energizer at Point 5. Prepare for a new screen.

A



B

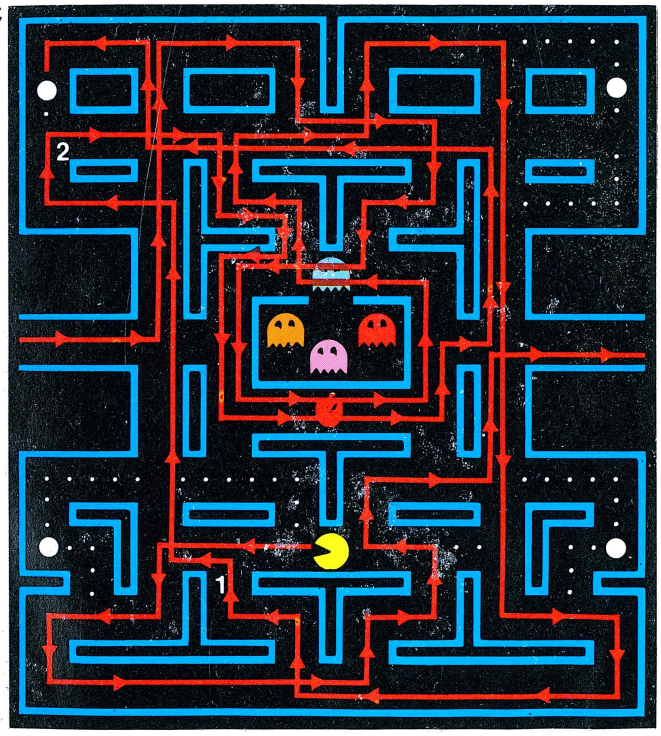


B. The Mid-Fruit Pattern. Again, classic programs will respond properly to this pattern. Some machines begin immediately on the Mid-Fruit Pattern—even though they start with a Cherry. A quick way to tell is if the Blue Monster comes out of the Pen and begins heading down fast to the bottom right corner. If that happens on a Cherry, use this pattern immediately. Forget the Cherry Pattern. Otherwise, start this pattern when a Strawberry appears and use it on the two Peaches. The big difference on this pattern concerns the Monster Pen at Point 1. You should go counterclockwise around this pen, as drawn. You're going to have some frenzied action at Points 2 and 3. If you don't panic, you'll make it. If you panic—or if you hesitate—watch out. You're on your own.

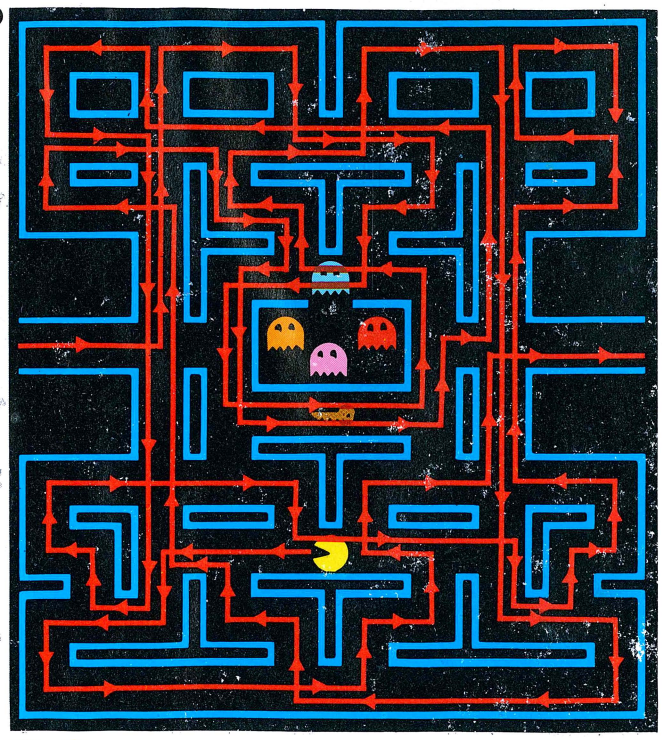
C. The Apple Pattern. The same path is used on this pattern as on the Mid-Fruit. It follows continually through the remaining Fruit, to the later Keys. You've got to use some body english at Point 1. And the Pink Monster will be coming fast and turn right down toward you. When he begins to come toward you, momentarily back-step your Pac-Man. The Pink Monster will retreat and run up the aisle on the left. Follow him closely. Pinky will continue moving up the aisle to the top of the screen. You must run to Point 2, as drawn. If you haven't followed Pinky closely, he'll meet you head-on at Point 2, and kill you. **NOTE:** When Monsters stay Blue for a minimum amount of time after being energized, don't try to kill them. Simply make your way through the pattern.

D. Later-Key Patterns. Energized Monsters don't turn blue on the 5th key. They turn blue shortly on the 6th. From the 7th key onward, they never turn blue again. Follow this pattern precisely. And remember: Don't hesitate. Simply hightail it as shown around the screen as fast as you can. And good luck!

C



D



TESTIMONIALS

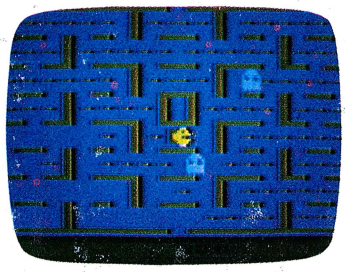
Jim, age 26, Nashville, TN. "I sometimes reverse direction just before I eat a killer pill and then turn back and get it. This is tricky because I usually have a bunch of Monsters on my tail. But the rewards are worth it. When you do this, the Monsters all reverse with you for a second, then come back toward you after you eat the pill. That way, you don't run after them, they all come to papa. Big bonus for small action—that's what life's all about, isn't it?"

Lin, age 26, Berkeley, CA. "As for tips, if you want to get extra points on the lower boards, just watch closely when the Monsters go to all four corners and that's the time to go scarf up some Fruit and leftover dots. Happy Pac-ing."

Pac-Man AT HOME

Existing home Pac-Man games are often interesting, yet seldom as satisfying as the arcade game. Some of the games, however, are developing a faithful following. K.C. MUNCHKIN (N.A.P. Consumer Electronics for the Magnavox Odyssey System) is a top seller. It features a variety of computer-generated mazes. You can also program your own mazes.

Atari introduced a licensed PAC-MAN game in March of 1982. Atari says, "it differs slightly from the original." A quick play of the game reveals the depth of that difference. The screen displays an entirely different maze than the arcade game. Tunnels appear at both the top and bottom of the screen. It also appears that the monsters (ghosts) are the same color. Atari states "In the four corners of the maze are special tablets. When Pac-Man eats one he changes color and can eat the ghosts." Judge for yourself how different this is from the arcade version.



People are standing in line to buy the much ballyhooed Atari Pac-Man cartridge. Although different from the arcade game in some radical ways, Atari's Pac-Man is a lot of fun.

A free-standing, battery-operated, tabletop version of Pac-Man is produced by Coleco. It's available now. The size of the game—about that of a small blender—causes many play restrictions. It's Pac-Man, yet it's not. The maze is quite similar to the arcade game. But what is proving to be this model's most popular feature are the game variations: Eat and Run, Demo, and Head-to-Head Pac-Man. Once you've mastered the tiny joystick and the dot-to-dot jumping movement of the monsters and Pac-Man, these variation games are fun.

Pac-Man (Midway)

Bonus:	Extra Pac-Man after 10,000 points, as determined by the owner.
Popularity:	Approximately 95,000 machines in existence to date. Falling off somewhat lately, but average machine still brings in approximately $203.00 per week as of April 1, 1982.
Location:	Media promotion, approachability, and social acceptance has made this machine one that does exceptionally well at any location.
Enemies:	Four Monsters remain the same throughout play.
Approachability:	Easy to understand from the word go.
Sex Appeal:	60% female, 40% male. Strong appeal to women accredited to its non-violent theme.
Age Appeal:	Cuteness appeals to the young and the young at heart.
Control Comfort:	Joystick only. Unless you can master a light touch, expect blisters and Pac-Man elbow.
Skill vs. Strategy:	Pattern strategies are the best way to go. Skill level minimal.
Clocked Or Not:	Not
Special Effects:	Superb animated intermissions are the rewards for good play. Otherwise, nothing spectacular.
Value For Money:	Once patterns are mastered, hours of play are possible.
Pros:	Proven endurance record; wide appeal.
Cons:	Emergence of "doctored" machines; blisters unavoidable.

There was no contest. Phoenix flew away with the 1981 *PlayMeter* award for best video-game graphics. And well it should. This is no run-of-the-mill video game, Phoenix. This is an electronic work of art, complete with classical music.

"Kill the Birds." That's a frequent cry from within the arcades. And indeed there are many Birds to kill: big Birds and little Birds, fast Birds and slow Birds, orange Birds and blue Birds. And like the Phoenix of myth, these Birds seldom die. They rise continually from the ashes.

"Phoenix" etymologically means: to Defend. That's the primary function of this game's birds. The Birds defend a Spaceship. And there are five waves of defending Birds. The first four waves are Birds alone, which you must destroy before getting to the payoff: the Spaceship, defended aggressively by Warbirds.

This is no ordinary video Spaceship. It differs from most video games in some extraordinary ways. First of all, it's huge: The Spaceship dominates the video screen during this fifth wave of play. Secondly, this is a living Spaceship. You monitor at all times the Alien within its confines.

You must reach the Spaceship. That's where your top points are. In order to reach the Spaceship, you must destroy four attack waves of Birds. And these are aggressive Birds! The top Phoenix players must successfully learn how to quickly and safely kill all Birds in the attack waves. You must reach the Spaceship for top points. And you should reach it on your first Laser.

This is a close-encounter situation. It is imperative that you plan as close an encounter as possible with the Alien, to score top points. In other words, the closer the Alien is to your Missile, the more points you rake in.

Phoenix has spawned a cult. Per our research, the game does better in street locations than in the arcades. And that makes sense. The music and graphics are lost, somewhat, in the high-energy atmosphere of the arcades. When Phoenix can be played in relative quiet, among only two or three machines, it's a rarely-experienced sensory masterpiece. And that's why most of the Phoenix devotees will play on the street, where they can best absorb all that Phoenix has to offer.

CONTROLS

AA. Movement Buttons *(left and right). These will, as indicated, move your Laser left or right. You are not able o move your Laser up or down. Keep two fingers poised over these buttons. You control this Laser through five arenas of space. You must keep moving. All the Birds can track your Laser, with varying degrees of accuracy and speed. Your basic drive should be to confuse their tracking system.*

BB. Force-Field Button. *The Force-Field will shield you from the Bird's fire. And it will destroy any Bird that inadvertently bumps into it. You can still fire away when inside the Force-Field. Most top players keep the Force-Field in play for roughly one quarter of their game. Be careful, however. There is a random recharge time between Force-Fields. You can't count on back-to-back Force-Field capability. And you must be prepared to move quickly once the Force-Field ends. Keep moving and firing. Otherwise, the Birds will kill you.*

CC. Fire Button. *Plan your shots. Do not fire at will. Shots are released only when the prior shot hits an object or clears the screen.*

ELEMENTS

A. Warbird Elements: Screen One. The first screen is the slowest screen. It speeds up level by level (1 level = 5 screens), but it is relatively slower than the other screens. There are 16 Warbirds on this screen. If you hit Birds with wings spread wide (1), they're worth 200 points. Otherwise, they're worth 20 points standing (2) and 40 attacking (3). Although the 200-point wing-spread Bird is attractive, it is difficult to hit because of its quick maneuverability. Don't wait for them to spread their wings. Kill them as fast as possible. Your primary aim should be: Get to the Spaceship.

B. Warbird Elements: Screen Two. The second screen is twice as fast as the first. That means the 16 Warbirds are more aggressive. You can also kill them twice as fast. The point values are the same as the first screen. It's best, again, to clear this screen as fast as possible.

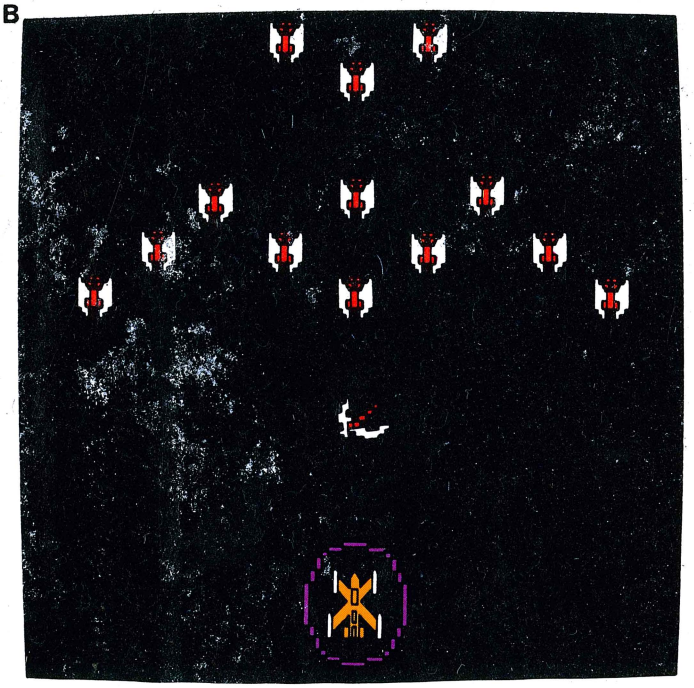
C. Phoenix Elements: Screens Three and Four. The third and fourth screens utilize similar Birds in different attack formations. The pace on each screen is the same. These Birds — Phoenixes — track you much more closely than the Warbirds.

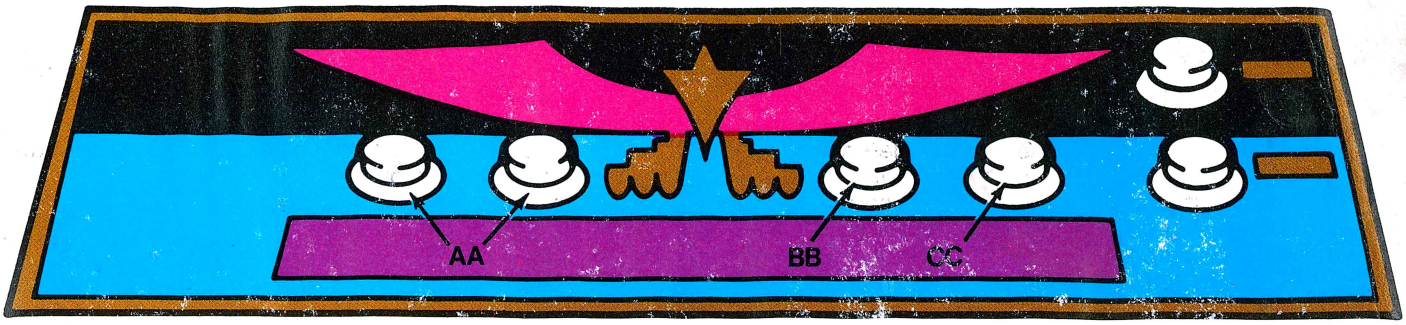
1. Eggs. Eggs are worth 50 points apiece. At first, Eggs appear alone on the screen. They then hatch into Birds.

2. Birds. Birds are worth anywhere from 50 to 800 points, at random. You can't collect much more than 500 points per Bird during the first two levels. The Birds sway back and forth across the screen, diving individually and then returning to the top.

A

B

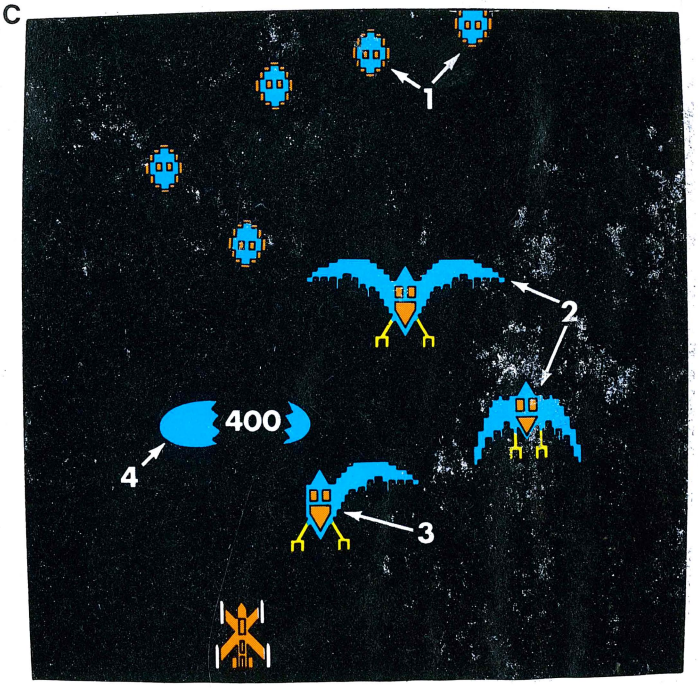




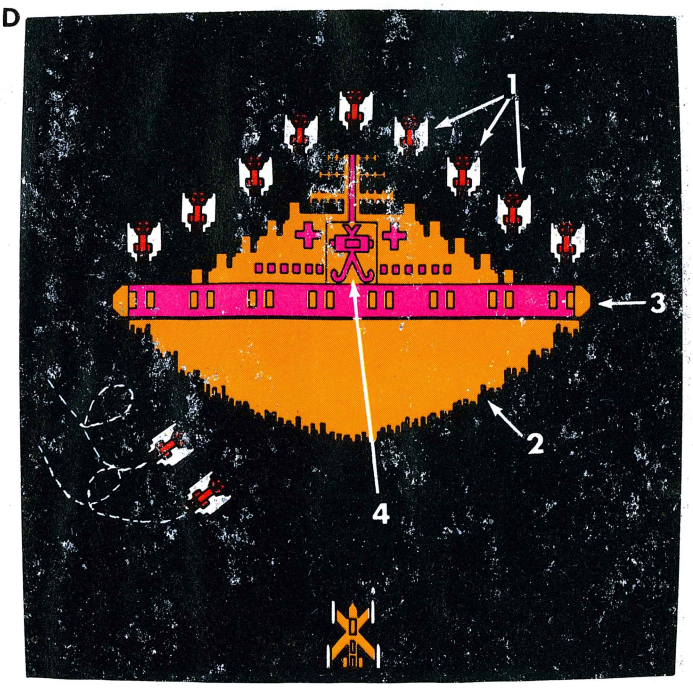
3. Winged Birds. You can clip a wing for 20 points. It does not affect the Bird's ability to fly. If both wings are clipped, the Bird regenerates instantly into a whole Bird again.
4. Broken Eggs. After successfully killing a bird, it will break into an Egg, revealing the bonus you get. Don't let this distract you.

D. Spaceship Elements: Screen Five. This is the most important screen for collecting points. The object is to kill the Alien in the middle of the Ship for top score. Learn this screen by heart.
1. Birds. Warbirds defend the Spaceship. Point values are the same as on the first screen. *Do not kill all the Warbirds.* Leave at least one at all times. If you kill all the Warbirds, a whole new flock will generate.
2. Orange Underbelly. If this Underbelly descends far enough to touch your Laser, you're dead. You must carve a path through this Underbelly to attack the Alien. The closer the Alien is to your Laser when shot, the more points. It's a good idea, therefore, to shoot away as much Underbelly as possible, to get the closest shot at the Alien.
3. Purple Band. The Purple Band constantly moves around the Ship's circumference. You must pierce this Band in order to kill the Alien. And you must shoot through the Underbelly to get at the Band. The Underbelly is thinnest at the far left and far right of the Spaceship. Attack the Band at these points.
4. Alien. The Alien is worth 400 points or more, depending on its distance from your Missile. The closer, the more points. This is the prize, the top dollar. It's the best means toward top scores.

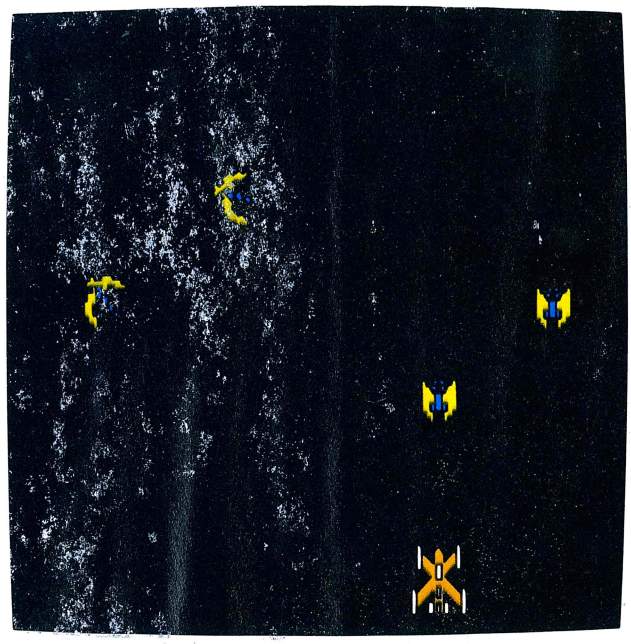
C



D



A



STRATEGY

A. Warbird Strategy: Screen One. Shoot the Birds. As fast as possible. Make sure to keep moving. Use the Force-Field when necessary. The movement is fairly slow. Don't concern yourself with points here. Points will come later. Think speed. The longer you take to kill the Birds, the more aggressive they become—and the harder they are to kill.

B. Warbird Strategy: Screen Two. Shoot, shoot, shoot the Birds. This should be one of your fastest screens. You can shoot twice as fast. The pace quickens. Use the Force-Field as necessary. Again, don't worry about point value. Your prime consideration should be clearing the screen.

C. Phoenix Strategy: Screens Three and Four. The third and fourth screens can be approached similarly. Here's how to do it. Eggs will appear on the screen and weave their way down. When the bottom Egg is about two thirds of the way down the screen, all the Eggs will hatch into giant Birds. These Birds will track you. Use this to your advantage. Sit in one spot to the left or right of the screen. Once the Eggs turn into Birds, start shooting. They'll all come down on top of you. This only works if you stay in one place. If you move too much, the Birds will scatter. When learning to play Phoenix, kill all the Eggs you can at the beginning of the screen. You'll have less Birds to contend with. After you master the killing

B

C

of these Birds, it's probably better to let them hatch. You'll then achieve top point value.

D. Spaceship Strategy: Screen Five. Two things to keep in mind: Don't kill all the Warbirds; save at least one. If you kill them all, a new flock will come. Secondly, wait for the Spaceship to get as close to you as possible. The closer the encounter with the Alien, the more points when it's killed.

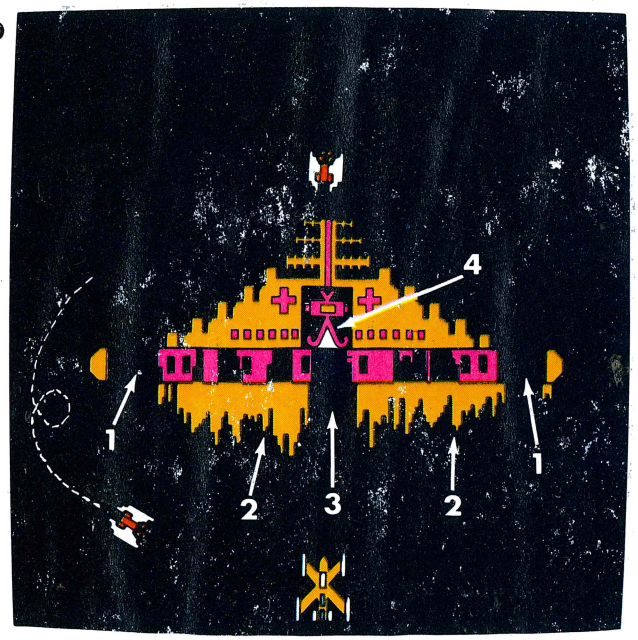
1. Concentrate first on poking holes in the Orange Underbelly. Kill attacking Warbirds as necessary. Once you've poked some major holes in the Underbelly, concentrate on the Purple Band. The Purple Band is most susceptible from the far left or the far right of the Spaceship.

2. If the Orange Underbelly touches you or the bottom of the screen, you're dead. Destroy as much of the Orange as possible, therefore. You will get a close shot at the alien.

3. Once you've cleared a lot of Underbelly at the bottom, forge a clear path through the center of the Underbelly to the Alien. Stay in one place, dodging or killing Warbirds as necessary. NOTE: From the second level on, there will be a group of Warbirds protecting the Purple Band. Keep your reflexes sharp. Those Birds are close and can attack instantly.

4. Once you've cleared a path, wait for the Spaceship to drop as close to you as possible. Dodge Bombs dropped by the Alien. Once the Ship is low enough, time a shot that will go through your path and through a hole in the Purple Band. Kill the Alien for megapoints.

D



TESTIMONIALS

Lin, age 26: Berkeley, CA. "I never shoot the Eggs. I always wait until they hatch into Birds and then kill them all for top points."

Bill, age 42: Chicago, IL. "I try to get rid of as much of the Purple Band as possible, when shooting at the Spaceship. I don't worry about the Orange. The more Purple I've shot away, the more points I get when I kill the Alien."

Claire, age 17: Aurora, NY. "When Warbirds are walking around at the bottom of the screen toward me, I put on the Force-Field to kill them as they walk into me."

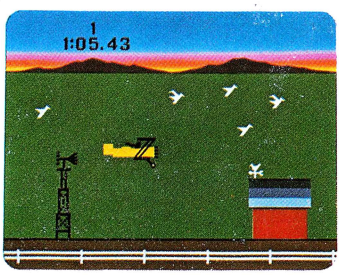
Chip, age 24: Concord, MA. "When the big Birds get too low, I get out of their way. It's stupid to try to kill them. You'll get a better shot when they reappear at the top of the screen."

Phoenix AT HOME

The award winning visuals of the arcade game Phoenix have yet to be matched in the home. The bird-in-flight animation is superb. As home machine capabilities increase, manufacturers will also develop clearer and sharper resolution, which will provide for more detailed animation.

Activision probably offers the best visuals in home video games. A new Activision cartridge—BARNSTORMING—features a vivid-yellow biplane, complete with a whirring propeller. The details of the animation are surprising—a pilot's scarf even billows in the breeze. With a joystick, you must maneuver around windmills, through barns, and around flocks of geese. Your game is timed against a clock; encounters with any obstacles slow you down. This game provides animated birds, but they aren't comparable to the arcade Phoenix.

Mattel Electronics offers ASTRO SMASH and SPACE ARMADA, which are good games to practice your target-shooting skills on. And Atari may surprise us all with their new Atari Video System X. From what we hear, both the visuals and the action will be superb.



You don't kill the birds in Barnstorming, by Activision. But you must weave your way through them in this fun animated game.

Phoenix (Centuri)

Bonus: Extra Laser, as determined by owner.

Popularity: Approximately 15,000 machines in existence to date. Average machine brings in approximately $201.00 per week as of February 15, 1982.

Location: Does best in taverns and other street locations. Does fairly well in arcades.

Enemies: A variety of Birds and the Alien's Mother Ship (every fifth screen). Birds can leave droppings at various speeds.

Approachability: Easily learned by observation. Prior bottom-cannon experience helps.

Sex Appeal: 50% male, 50% female. Good animation and sound appeals to all.

Age Appeal: All ages.

Control Comfort: Left and right movement buttons somewhat awkward, but easily learned. Fire and Force-Field buttons within easy reach. No painful side effects.

Skill vs. Strategy: Excellent combination of both. You must be able to dodge and fire accurately, but you also must plan your fire strategically.

Clocked Or Not: On the screen with the Mother Ship, you must kill the Alien before its Ship touches you.

Special Effects: Some of the best. Bird flight excellently reproduced. Animation appears more real than mechanical.

Value For Money: Good first game. Rapid improvement and high scores give you your money's worth.

Pros: Unparalleled animation; classical music; screen variation.

Cons: Road to Mother Ship frustrating; unpredictable aggression levels.

It's their first big hit since Space Invaders. The programmers at Taito (pronounced Tie-toe) were the masterminds behind the Japanese Space Invaders. Qix (pronounced Kicks) is their first totally American game.

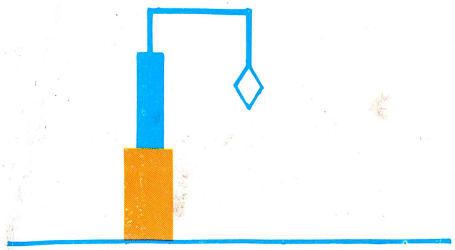
And now for something completely different. Qix is, without a doubt, the most revolutionary video game to hit the arcades since Pac-Man. According to Mike Von Kennel, Marketing Director for Taito, the concept started with the whirling of the Qix. And then "one bright-eyed programmer looked at it and decided to fill in boxes." None of the engineers liked it at first. But then they started playing it. According to Von Kennel, no work was getting done, and Taito had to remove the machine from Engineering and hide it in the factory. After a prolonged and detailed testing period, the machine was unleashed on the public.

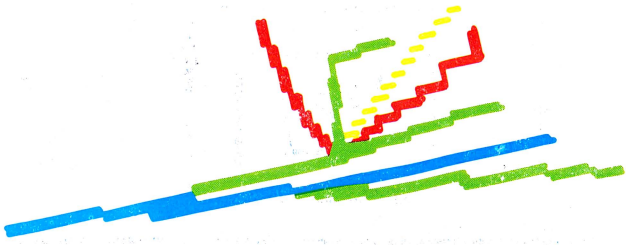
What's going on? The game could be described as a space-age Etch-A-Sketch. A strange video image—the Qix—moves erratically around the screen, constantly changing shape and speed. Your job is to block off at least 75% of the screen, all the while dodging the Qix and those feisty little agitators called Sparx. You're safe from the Qix when traveling along the border of its territory. It's when you cross that border and create a new line that the Qix will get you.

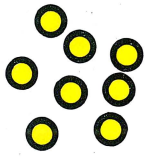
Don't just doodle around. Sparx constantly patrol the border of the Qix territory. If you hit a Sparx, you're dead. This forces you to draw new lines, making you susceptible to the death-kiss of the Qix. You can draw your lines fast or slow. Slow is more dangerous, but yields double the points.

The magic of Qix is that no two games are ever the same. There is a googolplex ($1\times100^{100}\times100^{100}$) of combinations that you can draw, yielding 75% of the screen or better. That's more possible combinations than there are atoms in the universe. Qix is thus a game of thought. Skill plays a role, but a minor role. Strategy is the key game element.

The success of this game is surprising. There was no precedent. It's a first of its kind. Qix is probably the best sign of video's limitless future.







Stix. *The territory that you attempt to claim is made up of Stix—the lines that you draw. You can draw vertical or horizontal lines of any length, as long as you avoid your enemies. You can create lines with the Fast Draw or Slow Draw Buttons. Territory claimed with the Slow Draw is worth twice the point value of Fast Drawn territory.*

Qix. *This abstract video image is your opponent. You attempt to close this bundle of video lines into as small a space as possible. If the Qix touches your lines before you have claimed an area, you must begin again.*

Sparx. *If, before claiming an area, you contact this glowing Sparx, you are dead. Two Sparx are released by the Red Line every 37 seconds. If you take too long to fill in 75% of a screen, the Sparx will turn blue and become more*

ELEMENTS

The elements of Qix are easily learned. The game itself displays all the necessary play information before you pump in your first quarter. This is one of few games that offer that kind of information. Learn the basics, surely, but spend most of your time on strategy.

A. Stix. This is you, and you can travel by two means. Either move along the border of the Qix territory or forge a new path into Qix territory. To move along the border, you need only move the Joystick and watch out for Sparx coming toward you. To forge new paths, you move the Joystick *and* push either the Slow or Fast Draw button.

B. Qix. The Qix is a constantly changing configuration of video lines. He can move anywhere in his territory. That territory is defined by the area you have blocked off, and claimed for yourself. If he contacts a line while you're claiming a block, you're dead.

C. Sparx. Sparx patrol the border of the Qix territory. More Sparx appear the longer you take to clear a screen. Eventually—if you hesitate greatly—Sparx turn blue and chase you everywhere you move. They'll even chase you on the lines you're drawing. If a Sparx contacts you, you're dead.

D. Fuse. The Fuse is the penalty for hesitation. If you stop while drawing new lines, the Fuse will start where you began to draw and move toward you. Once you continue, the Fuse will stop. But beware: If you hesitate again, the Fuse will pick up where it left off.

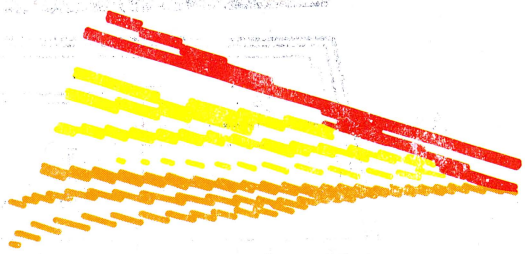
E. Spiral Death Trap. This trap is the direct result of your carelessness. You cannot retrace lines while you're in the process of drawing them. You must claim a blocked area. Remember: In order to successfully block off a claimed area, you must end your block at some point on the Qix border. You cannot return to any part of the line you're drawing and expect to block it off. If, while trying to complete a box, you panic, and keep turning inwards, you'll find yourself smack in the middle of the Spiral Death Trap. You won't be able to reverse. You'll have to stop. And the Fuse will follow down the Spiral and zap you.

F. The Red Line. This is a timed line that releases Sparx. The countdown time is usually 37 seconds, after which two new Sparx are released. The game will speed up and, if the Red Line closes again, the Sparx will turn blue and begin chasing you frantically.

AA. Joystick. This standard-operating, left-handed Joystick moves your Stix left or right, up or down. You can move your Stix along the borders of your claimed area by moving the Joystick alone. If you are moving into the Qix' territory, you must press either the Slow or Fast Draw while moving your Joystick.

BB. Fast Draw. Most of the work is done with the Fast Draw. It sets up your patterns. Use this control when forging into new territory. There is no need to use it while traveling along the border.

CC. Slow Draw. The Slow Draw is generally used to complete your patterns. You get twice as many points for areas claimed with the Slow Draw. Again, use it only when forging into new territory. Do not use it when simply traveling along the border. A good player always uses the Slow Draw at pre-planned strategic times, for maximum point value.

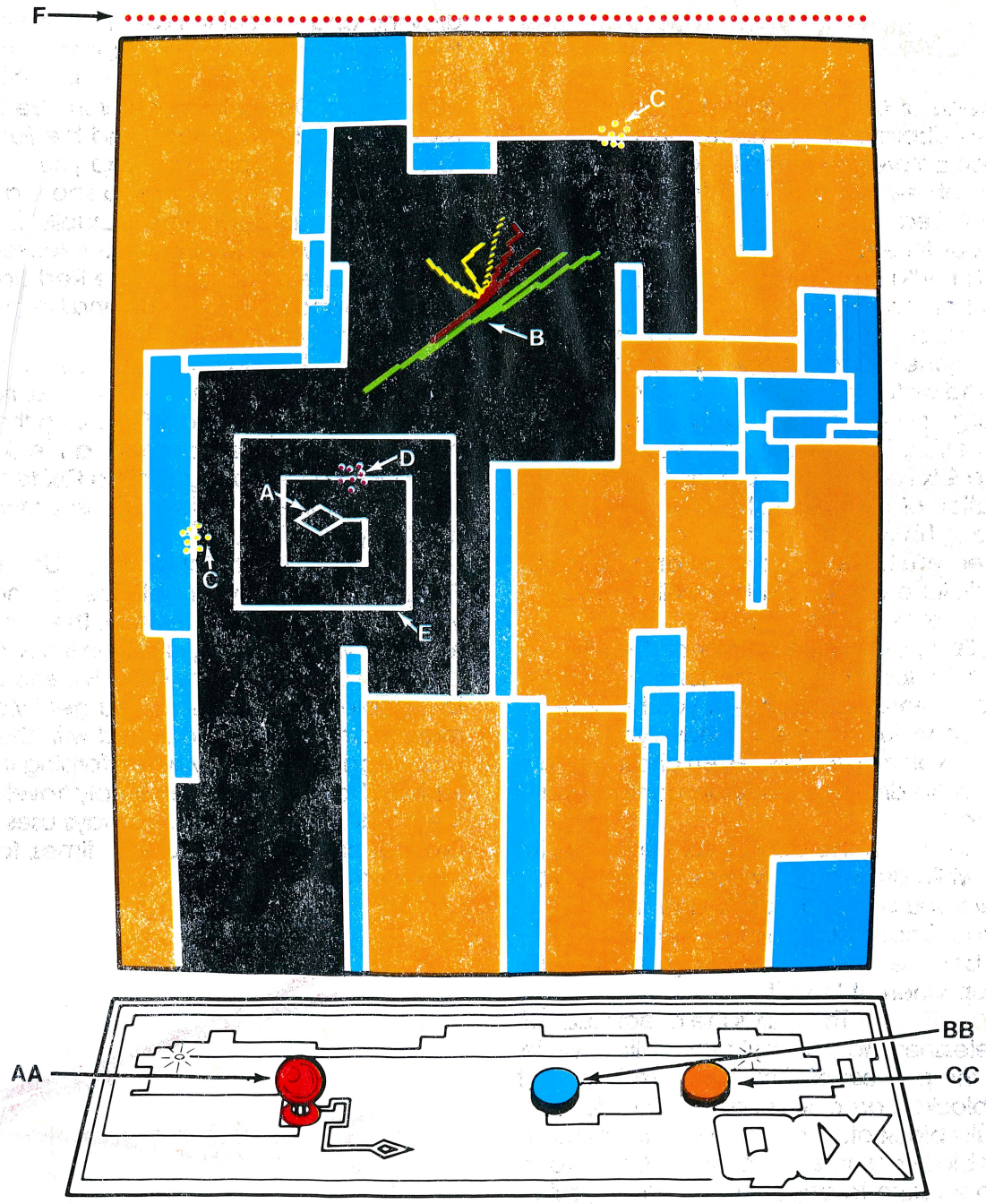


aggressive. Watch out!

Fuse. *He who hesitates is lost. If you stop in mid-line the Fuse will ignite that line and move toward you. It stops when you continue drawing. Each time you hesitate it will advance further.*

Spiral Death Trap. *This is the dead-end street of the game Qix. It occurs when you misjudge the connecting point to finish drawing a block and turn inward. You cannot retrace your line; you will be forced to continue turning inward and eventually stop. At that point the Fuse will burn its way along your line until it reaches you—say goodbye.*

Red Line. *Every second a dot from each end of the Red Line disappears. When all of the dots are gone two new Sparx are unleashed.*



STRATEGY

Strategy is 90% of the game Qix. There are basically two things to keep in mind, no matter what type of strategy you play: (1) Complete the screens as fast as possible (the longer you lag, the more aggressive the Sparx become, and the panic factor multiplies) and (2) Get as much of the screen as possible. 75% gives you a new screen, but no bonus points. You get 1000 bonus points for every percentage point beyond 75%. In other words, 85% will yield 10,000 bonus points. Another thing to keep in mind is the Slow *vs.* Fast Draw. The general rule is: Use the Fast Draw to set up your pattern; use the Slow Draw to complete your pattern. Slow Draw areas yield twice the point value as the Fast. Listed below are four different strategies. The first three are basically designed for one Qix. The fourth pattern is especially designed for a twin Qix.

A. Tree-Branch (or Hangman's) Strategy. The theory behind the Tree-Branch Strategy is this: If you create enough small open areas, the Qix will eventually get trapped in one. You can then seal off the Qix and claim the rest of the area—preferably beyond 75%.

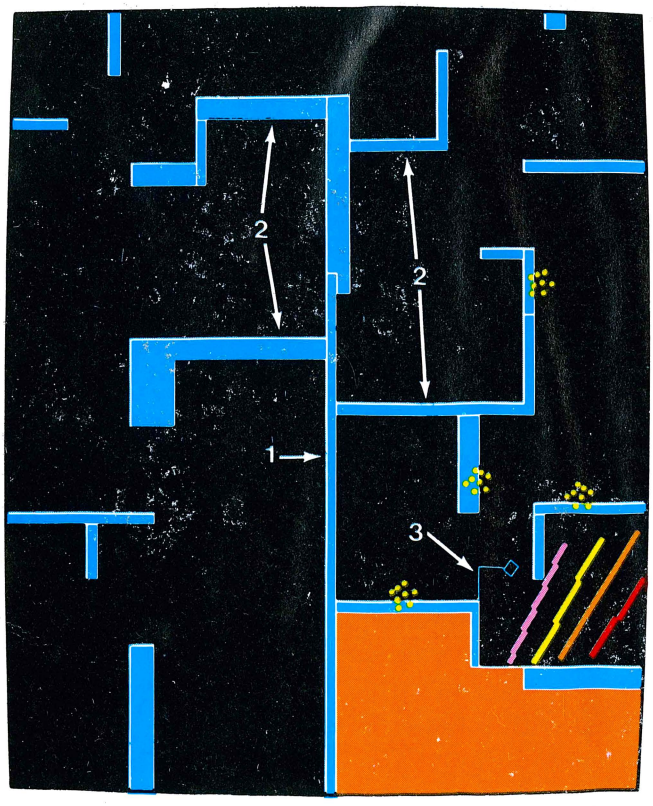
1. Erect a tree trunk. Start your pattern with a trunk nearly to the top of the screen. It may take up to six or seven moves. It may take only one. Be careful.

2. Create as many Branches as possible. It may be better to think of these as Hangman's Gallows. Create these everywhere—from the trunk and from all sides of the machine. Your primary aim is to leave as small a space as possible. It should be big enough for the Qix to enter, yet small enough to seal off quickly.

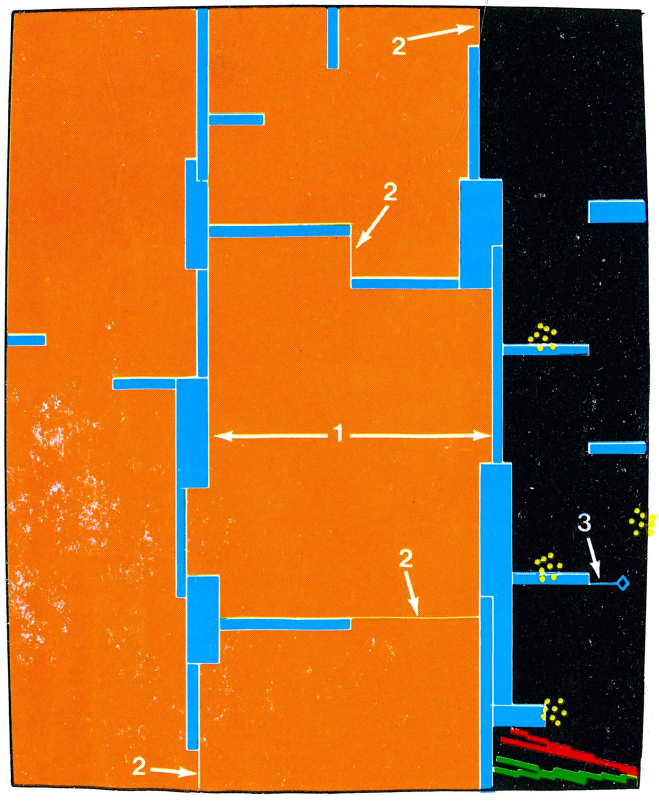
3. Trap the Qix. Once a Qix slips into one of the gallows, head down toward him—dodging Sparx as you go. Then seal him off with the Slow Draw, if possible. You will then get double the points you would for the Fast. If you left a small enough opening, the Slow should be possible. If you've planned properly, and the Qix is trapped in a small area, you will have claimed way beyond 75% of the screen.

B. Triple Arena Strategy. Another highly successful strategy follows a more structured method than the tree-branch strategy.

1. With the Fast Draw, build two columns —one from the top and one from the bottom—to split the screen into three vertical rectangles. Create horizontal blocks from time to time as you go up or down.



A



B

2. The Qix must choose one of the three areas. Go to the areas where the Qix is not, and begin blocking them off with Slow Draws.

3. Eventually, only one rectangle will remain. Move toward the Qix. Wait for an opportune time, and then block him into as small a space as possible. Once you block him, the screen will clear, giving you mucho bonus points.

C. The Quadrant Strategy. Another highly successful, very simple strategy is the Quadrant. In effect, your aim is to divide the screen into four separate parts.

1. Construct four columns. Place one in the center of each side, with the Fast Draw. Be careful. Take your time.

2. The Qix will claim one quarter. You can seal off the other quarters with the Slow Draw, collecting double points.

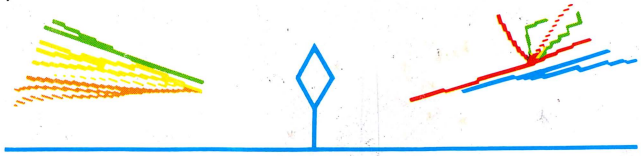
3. Wait for an opportune time to seal off the Qix. When you can block him into a small space, do so. And claim top bonus points for your strategy.

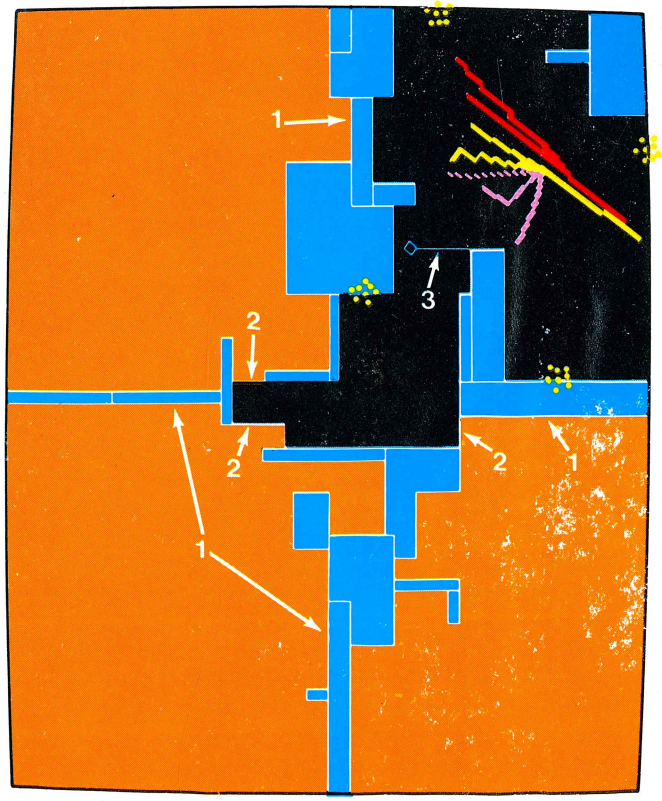
D. Twin-Qix Strategy. Twin Qix require special handling. You get double the points for splitting the two Qix on the third screen, triple on the fourth, etc. If you split it too early, however, with only, say, 13% of the board claimed, you get double that 13%. Big deal. Plan on getting as much of the board as possible—up to 74%. Then split the two Qix for big points. You can use either the Triple Arena or the Quadrant strategy for splitting the Qix. Just claim as much of the board as possible, box the two Qix into limited areas, and split them. Don't use the Tree-Branch strategy. You won't get enough points. A special Double-Qix Strategy is given below, for your instruction.

1. Build horizontal columns. Start at the bottom of the board. The two Qix will try to get into the largest space possible. The idea is to keep forcing both Qix toward the top of the machine.

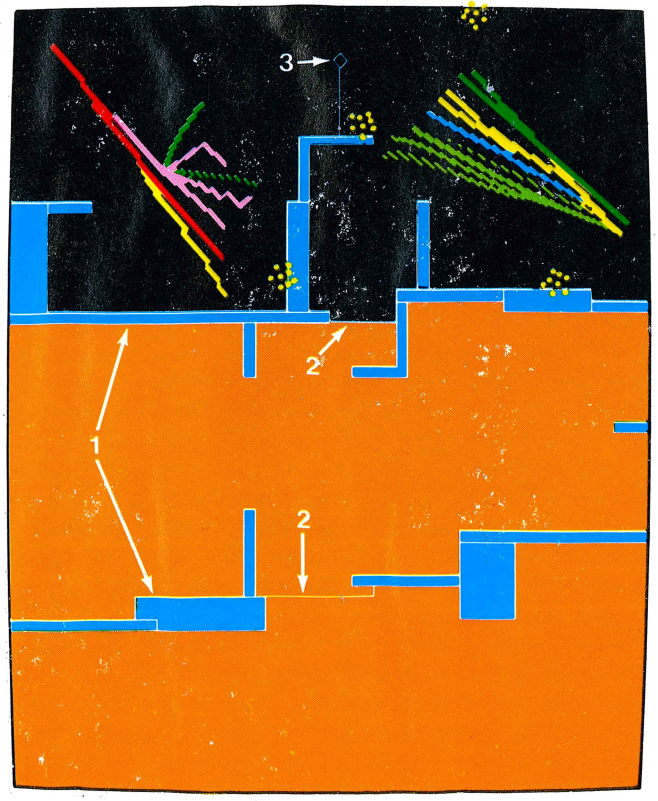
2. Use the Slow Draw. Claim the bottom section of the board as you continue up.

3. Claim up to 74% of the screen. You can then try to split the Qix. The best way is to keep inching upward from the center. Once the Qix split to each side of your column, Fast Draw a line to the top. You've thus split the Qix and made top points.





C



D

TESTIMONIALS

Marc, age 27: Skokie, IL. "Keep your eye on the percentage at the top. Once you hit 70%, just get little pieces until you see your chance to get a big hunk. I never feel any good with anything less than 85%."

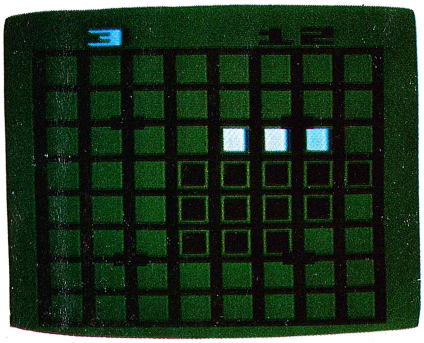
Peggy, age 29: Cicero, IL. "On the third screen, I always split the Qix quickly. I don't get many doubled points, but then I'm on to the next screen for triple the points."

Angela, age 23: Chicago, IL. "Just like the Empire State Building. That's what I do, I just build an Empire State Building up the center."

Qix AT HOME

Qix is a mind game without precedent. Nothing similar really exists for the home. And we haven't been able to dig up any rumors on future Qix games. However, most of the home systems offer games requiring high-level strategy. One of the best is called DYNASTY by N.A.P. Consumer Electronics for the Magnavox Odyssey system. It has been called a descendant of "Go," the popular game of the Orient. It's a deceptively easy game to learn. There are an infinite variety of plays possible.

Mattel Electronics offers several mind and word games. The best of these are CROSSWORD I, CROSSWORD II, and CROSSWORD III. The computer displays a standard crossword grid, complete with black squares. It then provides clues upon your request. Use the keyboard to punch in the answers. SNAFU, another Mattel game, is the closest home game to Qix. You move stripes of color in an attempt to box-in your opponent—either a friend or the computer itself.



One of the best home-video mind games is Othello, by Atari. It plays exactly like the challenging board game.

One of Atari's best mind-game cartridges is called OTHELLO (based on the board game by C.B.S., Inc.). It has three different levels of play. Again, you challenge either a friend or the machine. It plays like the standard OTHELLO game, which certainly requires deep strategy.

Qix (Taito America)

Bonus:	Some machines grant an extra marker (Stix) after you've achieved a certain amount of points (usually 10,000). Some never do.
Popularity:	Unrevealed number of machines in existence to date (Taito isn't telling). Average machine brings in approximately $199.00 per week as of April 1, 1982.
Location:	Adult appeal is accountable for this machine's excellent record in taverns and street locations. Fair record in the arcades.
Enemies:	Three: Qix, Sparx, and the Fuse. Two Qix appear from the third screen on.
Approachability:	Good on-machine instructions, including a video display on how to play. Fairly easy to understand at first.
Sex Appeal:	50% male, 50% female.
Age Appeal:	Abstract quality attracts more adults than other games. Players need to be mathematically oriented.
Control Comfort:	Lefthanded joystick and two draw buttons. The usual blisters and elbow pains accompany this joystick control.
Skill *vs.* Strategy:	Skill at avoiding Sparx, once mastered, gets you into a game of high strategy and abstract calculation.
Clocked Or Not:	Red Line timer counts down to release more Sparx. This makes them more aggressive and speeds up the game.
Special Effects:	Abstract and simple, but pleasing in its simplicity.
Value For Money:	Even high-score games can be short. We've never witnessed anyone stay on one quarter for over 20 minutes.
Pros:	Abstract qualities; pioneering concept; breath of fresh air.
Cons:	Speed acceleration more frustrating than challenging; annoying audio.

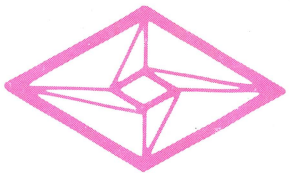
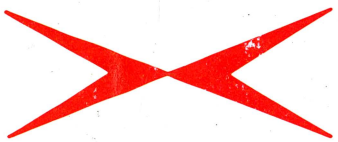
The original plan called for monsters. That's right, monsters—not the odd electrical shapes that define the modern Tempest machine. At a late developmental stage, Atari programmers realized that the Tempest video screen wouldn't generate proper monster resolution. But the game cabinets had already been built and illustrated with monsters! A fundamental change had to be made. And made fast. The change was made, all right. And it was this charged electrical change that makes Tempest a most unusual game.

This is one electric game. No matter what the original plan was, the modern Tempest machine is electricity itself. Some players may consider themselves "astral tightrope walkers" perched "atop the opening of a 'three-dimensional space platform'...dodging and destroying enemy aliens." That's what Atari thinks you think. We tend to consider ourselves live wires, open-circuits—moving not only to stay alive, but to define life itself.

Anybody can kill aliens. But how often are you given the opportunity to become electricity? Tempest displays a three-dimensional electrical field charged with enemy electrical shorts. You can be short-circuited (electrocuted?) in a variety of ways—each of them oddly, and at times intricately, predictable. Your task as the open-circuit is to fry the enemies in the electrical field. Once the enemies are destroyed, you're sucked forcefully through a vacuum tube and positioned swiftly in a new electrical field with a totally new 3D pattern.

There are sixteen different electrical fields. Each one is programmed to appear in a pre-planned order. This is a main feature of Tempest's electrifying design. You can choose any one of five entry-level patterns—1, 3, 5, 7, or 9. Number one is the easiest entry level and number nine is the most difficult. You progress—if you stay alive—from your chosen entry level to pattern 16, at which point the electrical fields change color. A new set of electrical fields is then generated, and the bonus points rise. If you reach a high level, you can begin your next game on that level. You simply deposit your quarter within 30 seconds after your last game. For example, if you end your first game on level 15, you can begin your second game on level 15. The object of the game remains the same on every screen. The pace speeds up, of course, and the patterns become more intricate. The going, in other words, gets tougher. But the rules are the same.

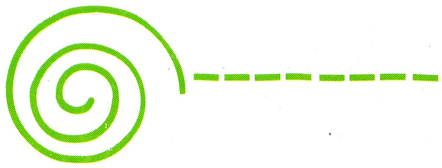
The idea has caught on. Tempest is the number three money-making video game, as of this writing. We've heard reports that the original designers are unhappy with the game, in its new form. They wanted monsters. Let them stay unhappy. We'll just take full advantage of their magnificent error, and enter willingly into the revolutionary game-world of electricity.

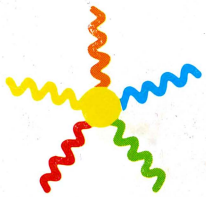



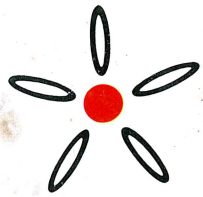
Live Wire *(Open Circuit). You are the conductor that energizes this player around the circuit of the electrical field. Your path is limited to the perimeter of the different playing fields. Your fire power is unlimited, but comes in a volley of shots that must hit something before you can fire again.*
Pulsars *(200 points). High-voltage Pulsars have the power to short-circuit a lane within the electrical field. You cannot cross a lane that a Pulsar has had his way with. They begin to pulsate after successfully short-circuiting a lane.*
Tankers *(100 points). Like splitting atoms, the Tankers become more dangerous when jolted. They split into two highly charged Flippers. This also occurs should a Tanker reach the top of one of the lanes.*

ELEMENTS

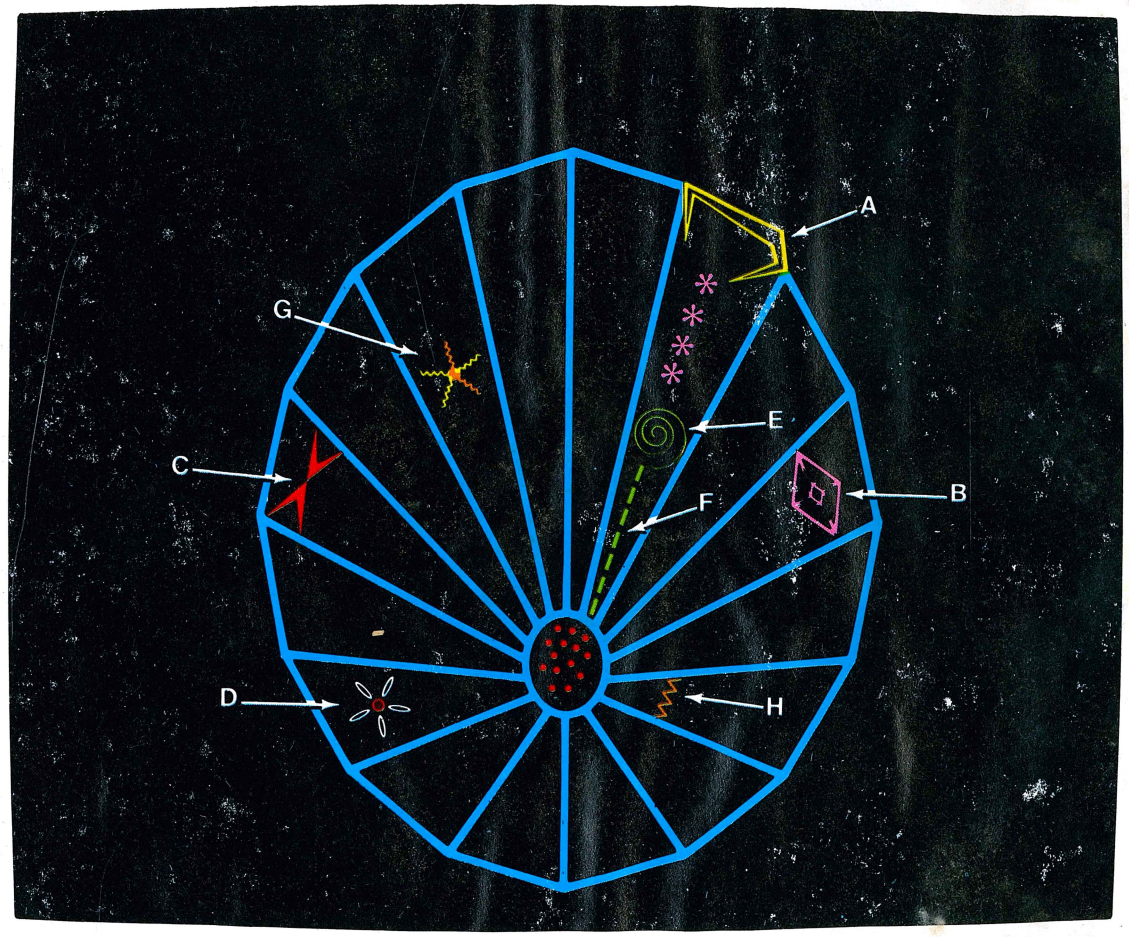
A. Live Wire *(Open-Circuit).* You energize this player through the electrical field. The trick is to keep moving. You have unlimited ammunition. On the entry-level screens (1, 3, 5, 7, or 9), it's best to fire constantly—to fry the enemy. You'll have to plan your fire more strategically on later screens.
B. Tankers *(100 points).* In and of themselves, Tankers present minimal danger. They become dangerous either (1) after you jolt them or (2) when they reach the top of a lane. In either situation, they split into two Flippers. And Flippers are dangerous. Kill the Tankers near the center of the tube. Don't let them get too high. If you kill them near the tube top, the Flippers will be on top of you. Tankers move slowly, in one lane only.
C. Flippers *(150 points).* Flippers are very quick and very dangerous. They can flip from lane to lane rapidly. Spawned by the Tankers, Flippers progress quickly toward the ends of the lanes. Try to kill them while they're in this process. When they've reached the top of the lanes, they chase you with lightning speed. You can kill them then, but it's tough—you must fight fire with fire. It's always preferable to kill them when they're still in the lanes.
D. Spinners *(150 points).* Spinners are nothing more than good-looking Missiles. They shoot quickly out of a tube—and often out of tubes with Spikers. Avoid Spinners. If they hit you, you're dead. If they miss you, they'll spin away from the electrical field, never to bother you again.
E. Spikers *(50 points).* These are slow-moving, predictable enemies that never cross lanes. They rarely reach the top. Spikers have but one purpose: to create Spikes—as long as possible. Destroy the Spikers as quickly as you can or you'll have to contend with longer Spikes.
F. Spikes *(no points).* Spikes are inanimate enemies. They are not killed; they are simply destroyed. Spikes cause problems at the end of an electrical pattern—after all the animate enemies have been dealt with. In order to reach a new electrical pattern, you must travel down through a lane. If there's a Spike in the lane, you'll be impaled—which means you're one dead wire. Spikers leave Spikes. If you fry the Spikers fast enough, the Spikers they leave will be short. You can then quickly chip away at them.
G. Fuseballs *(250, 500, or 750 points).* Fuseballs appear late in the game. They're slow, but unpredictable. They constantly change lanes, moving up and down to dodge your shots. They're aggressive, but they aren't fast. They're very clever. Destroy them at the first opportunity.
H. Pulsars *(200 points).* These enemies attempt to short-circuit lanes within the electrical field. They've completed short-circuits once they start pulsating. It is impossible to cross lanes that Pulsars have effectively short-circuited. You must destroy them when they're in the process of crossing lanes, when they're not pulsating. If you're in a lane when a Pulsar short-circuits it, you're dead.
AA. Fire Button. You have an unlimited amount of fire. At the beginning, fire constantly, keeping your finger down on the button. On later screens, when accuracy is of prime importance, it's dangerous to fire constantly. Plan your shots for the best impact.
BB. Super Zapper. You have use of one Super Zapper per pattern. Before you enter a new pattern, the Super Zapper will recharge. You cannot build up Super Zappers. They aren't cumulative. By all means, use one Super Zapper per pattern, but use it smartly. The Super Zapper will destroy every enemy in every lane, except the Spikes. You get a little extra time after the Super Zapper has zapped, however. And that's a good time to chip away at the Spikes.
CC. Control Knob. This super-sensitive knob will spin you rapidly around all the open lanes. Learn how to control this knob precisely—to both move quickly and to enter any lane at will. You must learn to control the knob for three situations. (1) Learn how to operate the knob at lightning

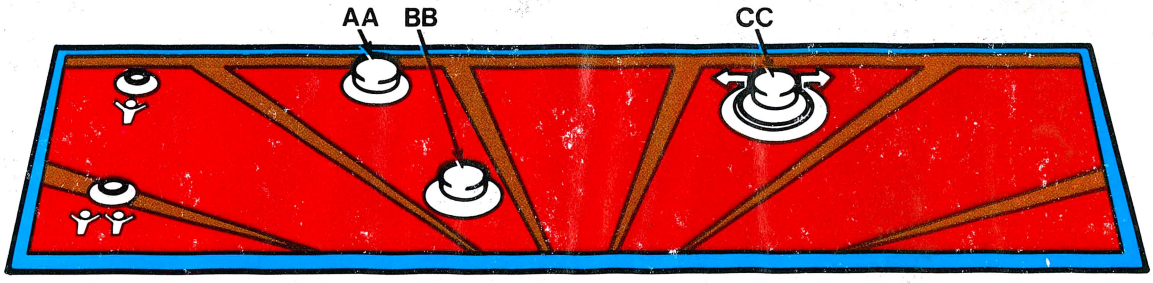






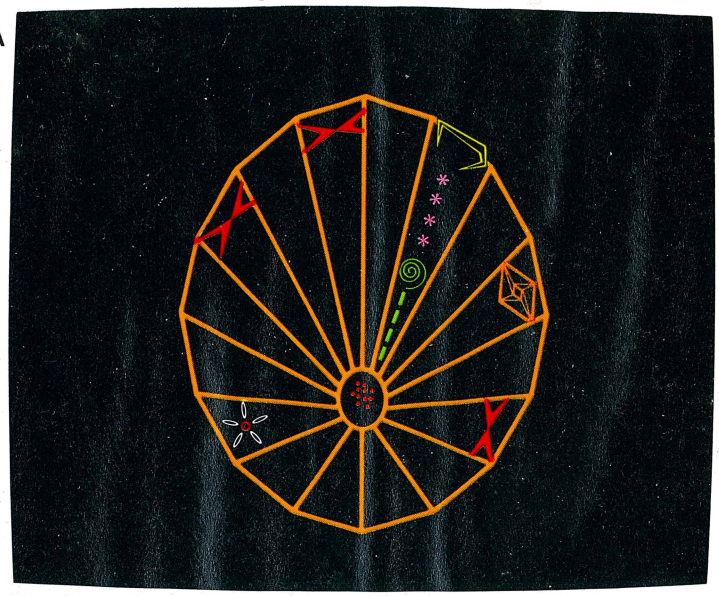
Flippers *(150 points). These hourglass-shaped enemies are very dangerous. They quickly make their way to the ends of lanes. They then attempt to violently close your circuits.*
Spikers *(50 points). Spikers pose little threat as long as they are killed quickly. If left alone they will create Spikes that will inhibit your entry into lanes when necessary.*
Spikes *(no points). The longer they are, the tougher they are to eliminate. You cannot ride down a lane where a Spike exists (you will be impaled). Eliminate them quickly.*
Fuseballs *(250, 500, or 750 points). Slow but crafty, these late-in-the-game enemies move steadily about the field. If ignored, they will eventually get out of hand.*
Spinners *(150 points). Spinners shoot out of tubes quickly. Avoid them. They disintegrate once out of the tube.*





speed. That means running it rapidly around the electrical field. (2) Learn accuracy. You must be able to stop on a dime—at will. Stopping accurately means the difference between high and average scores. (3) Learn to cross lanes when traveling *down* the lane, to a new electrical pattern. If, when moving down a lane, you witness an impaling Spike, switch lanes. You can do it. And this trick will ensure your safe journey to a new electrical field.

A



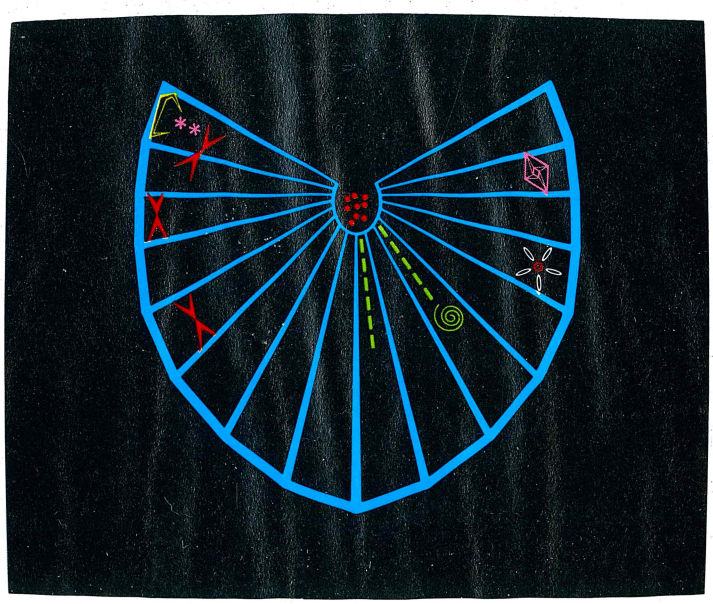
STRATEGY

A. Move constantly. Remember: You're a live wire. Be constantly aware of the enemies. Dart quickly to lanes where enemies are. Speed is especially important when frying Flippers. If Flippers have reached the top lanes—and begin their chase—you must with lightning speed attack them. And fire constantly. Don't be timid. And watch out for Spinners!

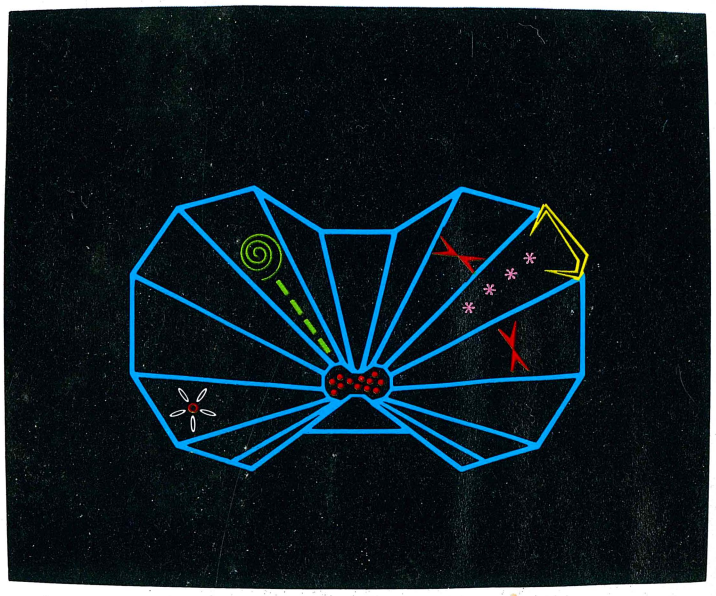
B. Shoot from the ends of unconnected patterns. There are two types of patterns: Those that allow your piece to sweep full circle around the pattern, and those that do not allow you to sweep full circle. When playing the latter pattern types—unconnected patterns—there are two "safe" spots to ambush Flippers. Those spots are on top of the extreme (end) lanes. You can stay safe on top of an end lane by jiggling your piece back and forth and firing constantly. The Flippers will drop into that end lane, becoming susceptible to your fire. After destroying the Flippers, you can move around and kill your remaining enemies. Remember, always: You must both *move* and *fire*. You can't stay still and expect to survive. And make sure that end lanes are free of Spikes.

C. Kill two Flippers with three shots. Flippers are

B



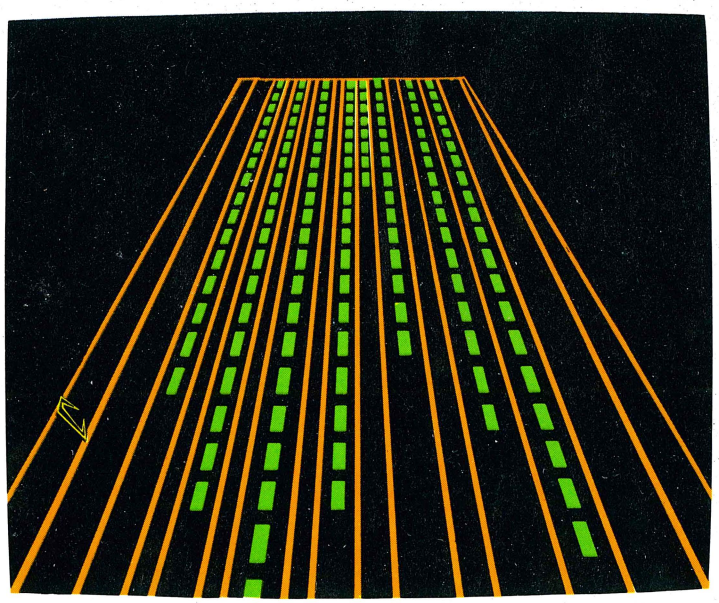
C



your most persistent enemies. It's important to kill them fast, before they reach the top of the lanes. A simple, effective method of killing them is this: Fire one shot at the Tanker, which will then split into two Flippers. One Flipper will immediately enter the lane to the left of the Tanker, the other Flipper to the right. Move to the lane at the left and shoot one Flipper. Then move back two lanes—to the one on the right—and kill the other Flipper. Do this lightning fast, or it won't work. Once this strategy is mastered, Flippers can be eliminated early in the game, before they reach the top.

D. Keep lanes free of Spikes. In order to move from one pattern to another, you must move through one of the sixteen lanes. This occurs once the animated enemies have been killed. Inaminate Spikes remain after the other enemies are dead. If you're at the top of a lane that has a Spike—and you move through that lane to the next pattern—you'll be impaled. Take all the free time you have to push spikes back. Always know where your free lanes are. On unconnected patterns, it's best to keep the end lanes free of Spikes. On connected patterns, leave the widest lanes free of Spikes. Once the words "Avoid Spikes" appear on the screen, you should be able to instinctively move to a free lane.

D



TESTIMONIALS

Dominick, age 36: New York, NY. "Prepare yourself for the invisible screens. They're on the fifth cycle. I hit the Super Zapper earlier than usual to see the screen I'm playing on."

Willie, age 18: Chicago, IL. "When playing on the bowling alley screen, watch out for the Fuseballs. Don't let them reach the edge, or you can't get rid of them."

Sam, age 26: Chicago, IL. "Look at the red dots in the center. That way you'll be ready for the end of the wave. I then hit the Super Zapper, kill the last few, and get ready to shoot the tube."

Tempest AT HOME

With the seemingly endless milking of video ideas these days, it's not often that you find an arcade game with no home video counterpart. However, Tempest, by Atari, is just such an original. We know of no home video system to date (save computer systems, like Apple, Atari 800, etc.) that even begins to reproduce the electrifying sensations of three-dimensional motion that is found in Tempest.

N.A.P. Consumer Electronics, manufacturers of the Odyssey² home video system, has developed a home-game format that could never be reproduced in the arcades. There are three games in this format, and they all share one unique feature—a video game cartridge combined with a traditional game board.

Wall Street Fortune Hunt by Odyssey² combines the thrill of the "big board" with the strategy of a conventional game board.

The third game in this fantasy series is called WALL STREET FORTUNE HUNT. You are given $100,000 and allowed to invest it any way you choose (definitely a fantasy). Your television screen provides you with all the information you need—stock reports, gold prices, prime rate fluctuations, and even news flashes. The idea, of course, it to make lots and lots of money!

Tempest (Atari Incorporated)

Bonus:	Extra shooter every 20,000 points (not including bonus points). Initial choice of pattern level increases depending on score of previous game.
Popularity:	Approximately 40,000 machines in existence to date. Average machine brings in approximately $214.00 per week as of April 1, 1982 and is still climbing the charts.
Location:	Very adult game. Has made most of its money in the arcades, although initial street success is good.
Enemies:	Six, with individual characteristics. Flippers, Spikers, Spinners, and Tankers appear on early patterns. Pulsars and Fuseballs appear later in the game.
Approachability:	You can choose your difficulty level. Novice level is very approachable. Good on-machine instructions are must reading.
Sex Appeal:	50% male, 50% female. Abstract quality plus warp space-ride appeals to both.
Age Appeal:	Adult game. Lightning-fast reflexes appeal to some younger players.
Control Comfort:	Excellent. Fire and Superzapper buttons are easy to use. Rotator knob is as smooth as expensive stereo equipment.
Skill *vs.* Strategy:	Super fast action requires lightning-fast reflexes. Some strategy is necessary.
Clocked Or Not:	Not
Special Effects:	Attractive abstracts and impressive warp-ride down the tube.
Value For Money:	Expensive game. Short play-time until you get good.
Pros:	Electric sensation; variety of patterns; instant-replay option.
Cons:	Quarter eater (even for the best).

Frogger

Frogger has found a devoted audience. This odd little game will never have the mass appeal of a Pac-Man, but for those who enjoy maneuvering a Frog through traffic and rivers, this can be a thoroughly rewarding game.

The object of Frogger is simple: Get to the top as fast as you can. You're being timed by a clock. If the clock runs out before you reach the top, you're finished.

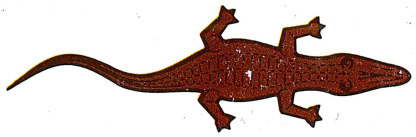
The road is treacherous. To get to the top, you must swiftly and cautiously cross three different areas on the screen. The first area is the Highway. Cars and Trucks pass from both the left and right. You must maneuver your Frog safely through this moving maze. Once you get through the traffic, you stand on a stone wall, ready to cross the river.

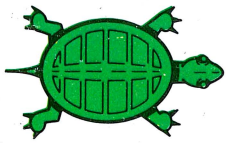
The River is swift and alive. There are Turtles and Logs crossing left and right. You must jump on either a Log or a Turtle, making your way to the top of the screen. If you miss your jump, and land in the water, you're dead. And you're not always safe on a Turtle! They dive from time to time. If you're on their back when they dive, you drown. Your final objective is to reach one of the five safe spots on top, between the green Lilypads. Once five Frogs reach the top, a new screen begins.

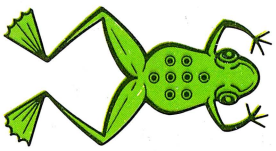
The action on later screens picks up. And new enemies are brought in. Traffic, of course, becomes fierce. You now have to contend with hungry Snakes on the walls. Logs in the later screens may actually be Crocodiles (look for the eyes). And Turtles are constantly hopping up and down. The trick here is to be quick and alert.

Get fat with points. Bonus points add up when you eat Waterbugs or Flies. And if you safely escort a Lady Frog to your pad, you score big.

Frogger may be the "cutest" game in town. It's an easy game to jump right in and play. The amount of Frogs you get per quarter varies from arcade to arcade. One of our favorite arcades gives you five. Most others give you three.







Missile Command

Be advised: There's a rumor going around that a federal agency is keeping track of the top Missile Command players. If there's an emergency, they're going to want to know where the top Commanders are.

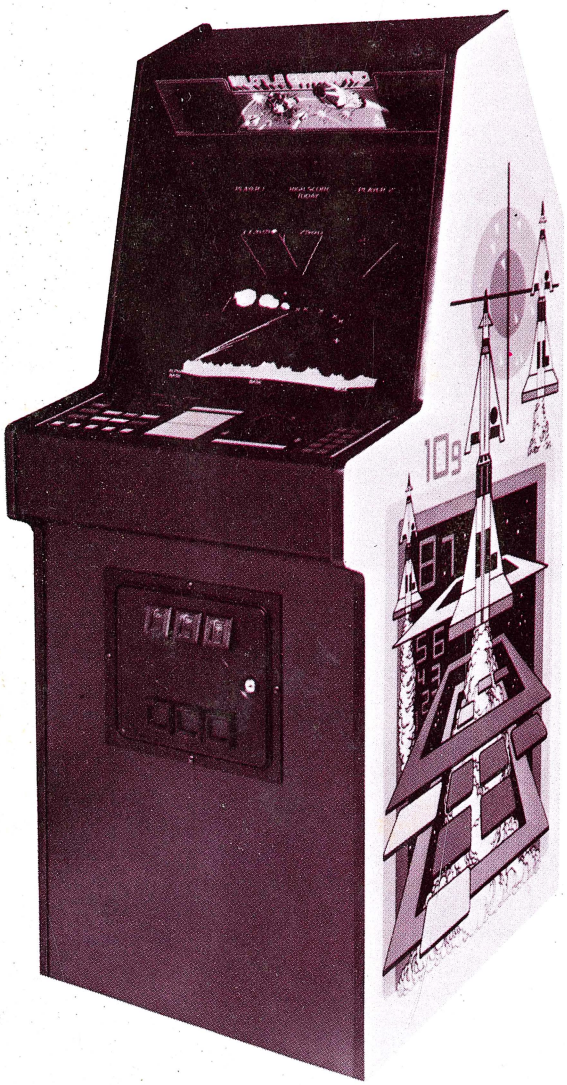
Missile Command is an amazing game. It's been around for quite awhile. In fact, if this book was published a year ago, we would have highlighted Missile Command as one of our top games. It's slipped in popularity of late, but it still maintains a devoted audience. One of us still considers Missile Command the best video game around.

Missile Command is fairly complicated. Your basic task is to save Cities from enemy attack. You and the Cities are all stationary on the bottom of the screen. The enemies attack from the top and sides of the screen. You have three armed bases—Alpha, Delta, and Omega. You can move back and forth from these bases to kill the enemy. If your enemies successfully destroy all your Cities, the game is over.

The enemies are crafty. At first you contend only with Missiles, for 25 points each. Missiles can appear by themselves or be generated by MIRV—an abstract video line—which splits into a random number of Missiles at any point. On the second screen, you must contend with Bombers (100 points) and Killer Satellites (100 points). These are crafty and quick opponents. The major opponent—and the major point value—appears from the sixth screen on. This is the Smart Missile. As most Missile Commanders will tell you, it's the Smart Missile that should demand your attention.

Bonus points are given after each screen. You get bonus points for Cities still standing and a tally of bonus points for the enemies you've killed. Every 10,000 points, you get an additional bonus City.

Missile Command is primarily a reflex game. However, there are a few strategies. Most top-score players rely on the Smart Missiles for their scoring. In a maneuver similar to Asteroids, these players allow all of their Cities to be destroyed, save one. They then defend that City, concentrating on the Smart Missile. The Smart Missile is the only enemy that tracks living Cities. The other enemies waste time destroying Cities that are already dead.



What's your highest score? High Missile Command scores are in the tens of millions. And there are still many people seen playing this machine every day in the arcades. If you've never played the game before, by all means start playing it.

Ms. Pac-Man

We didn't expect much of Ms. Pac-Man. That's because sequels to popular games are usually disappointing. But Ms. Pac-Man has surprised us with its grace and charm. Although in many ways similar to the ballyhooed video game Pac-Man, Ms. Pac-Man forges a new path that strikes us as truly original.

Ms. Pac-Man will win your heart. She's got a ribbon in her hair and a beauty mark on her face. You control Ms. Pac-Man through a maze, gobbling up dots and eating Monsters and Fruits. Point values are generally similar to Pac-Man—200, 400, 800, or 1600 points for Monsters, 10 points per dot, etc.

The maze is the big change. Or better yet, the mazes. First of all, mazes are constructed with more corners than in the original game. These corners slow down both Ms. Pac-Man and the Monsters. There are two Tunnels to most mazes—one at the top and one at the bottom. The location of the Tunnels is never the same, however, because the mazes keep changing.

That's right—Ms. Pac-Man is a multi-mazed game. The first two screens are the same, but the third is different. Maze patterns appear to repeat twice and then change. Every new maze pattern is outlined in a new color.

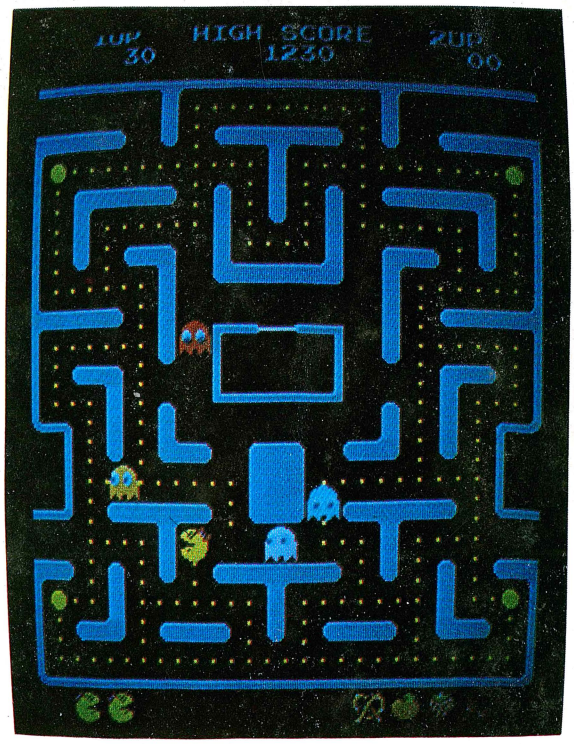
Watch the Fruits closely. No longer do they sit stationary under the Monster Pen. These Fruits move—and you've got to chase them and eat them. We've found this distracting. Our original Pac-Man training taught us to beware of everything that moves. At first, you may think the Fruits are Monsters. You've got to look closely.

Intermissions are as entertaining as ever. Each intermission plays with Pac-Man and Ms. Pac-Man: meeting each other, chasing each other, and, of course, falling in love. As always, intermissions are the reward for a high score.

The program is random. The Monster chips don't follow any pre-planned course. In other words, there are no patterns to follow. You're on your own. This does not make the game any less enjoyable; it simply denies phenomenal scores.

Inky, Blinky, Pinky, and Sue—Ms. Pac-Man's foes—are certainly unpredictable. Three of them can dart out of the Monster Pen at one time. And there's no hesitation after Ms. Pac-Man eats an Energizer. You could count on this delay in the Pac-Man game. Forget it in Ms. Pac-Man. And these energizers are at different spots on the screen.

All-in-all, this is a very enjoyable game. The absence of patterns really tests your Pac-Man skills. Lures, fake-outs, and speed are your primary weapons in this game. Use them frequently.



Turbo

Turbo is impressive. In fact, it's the most impressive video racing game we've played. The sensation is phenomenal. Not only can you move your Car at top speeds, but you drive that Car through some of the most spectacular graphics video has to offer.

This is an authentic car race. The object of the game is to pass as many Cars as possible within a given time period. If you pass 30 Cars within the time limit (usually 99 seconds) more time is allotted. And you score bonus points. Points are also awarded whenever you complete a lap.

Strategy is important. One strategic aspect of Turbo concerns your viewpoint. Most racing games give you little perspective outside of your immediate area. Turbo offers a sense of distance. Therefore, you usually see the Cars you need to pass long before you actually overtake them. Strategy is then as important as pure reaction. You must plan how to pass those Cars.

Not all the Cars are manned by expert drivers. Some of them are very reckless and unpredictable. They may crash at any time, forcing you to quickly dodge them. Emergency Ambulances also race through the track. Avoid them!

The real magic of Turbo is the graphics. You begin your play on a City Boulevard, complete with skyscrapers. You eventually cruise through the City onto curving Country Roads. Tunnels and Bridges are intricate parts of every lap. And crossing the Ocean-Front Palisade is one of the most dangerous parts of the game. You end your race back in the City at sunset. By this point, the City's skyscrapers are lit like Christmas trees.

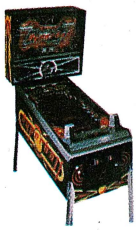
The driving action is realistic. It has to be felt to be believed. You control a Speed Shift and an Accelerator Pedal. The control of the Pedal is superb. You can increase and decrease your speed at will. In fact, you can follow a Car closely, waiting for an opportunity to pass. The Steering Wheel is equally responsive. But beware of icy roads, steering then becomes awkward.

Watch out for dips. If a Car in front of you disappears gradually and reappears, you are approaching a dangerous dip in the road. Those Cars that have dipped in front of you can reappear suddenly. Steep hills also test your road skills. Make sure to exercise much caution on hills.

Turbo gives you your money's worth. It's an exciting game to play. It's only recently been introduced to the arcades. We wouldn't be surprised at all if it's one of 1982's biggest hits.

Up-and-Coming Games

Eliminator (SEGA/Gremlin) Four against one is fair play when that one is the mighty Eliminator—a large spheroid that floats randomly about the video screen. This Eliminator is invulnerable except through a narrow passage (its throat?) to its core. During the game, the Eliminator sends out ships bent on destroying the up-to-four players (who can choose to work alone or in teams of two). You and your fellow players, while avoiding Eliminator ships, attempt to force opposing players' spaceships (with energy bolts that push objects) into a deadly collision with the Eliminator base. The lone surviving player must then fire down the Eliminator's throat to win the game. The four-player game may prove to be a popular idea in the arcades. It may draw in the foosball players and double daters. Eliminator is more than a novelty, and promises to develop a loyal following.



Hyperball (Williams Electronics) Hyperball, by Williams Electronics, is the first game to successfully bridge the gap between video and pinball. Housed in a pinball-style cabinet, this revolutionary game features the familiar flashing lights and metal spheres of early pre-Pong days. However, with the aid of two pivoting trigger mechanisms that control a "Hyper-cannon," the player can shoot up to 250 balls per minute (if fingers can really move that fast). What's more, those flashing lights can shoot deadly lightning bolts back at you! You must also contend with video-style Baiters, Z-bombs, and multiplying attack waves. Hyperball could very possibly fulfill the dream of many—to become the arcades' first true Video/Pinball Wizard.

Make Trax (Williams Electronics) Make Trax is a surprisingly popular new video game. And it's a game with one ingenious objective: to paint a maze yourself. As the maze is being painted, two devilish little goldfish form in the aquarium and take chase after the paintbrush. If they overtake the brush, a new one will have to be used. Your only defense against these twitching-tailed little fish is to roll over them with the rollers provided. Each time you roll over a goldfish you collect bonus points, and temporarily put them out of commission (but like Pac-Man monsters, they go back to their aquarium, regroup, and come back to torment you further). If that isn't enough, you also have to contend with other little beings determined to Make Trax in your nice paint job: kittens, mice, and even a dirty bird that leaves droppings in your fresh paint. These creatures (including cars, cats, and an invisible, footprint-leaving man) can be caught—if you're quick enough—for 1000 points each. When you reach 10,000 points, you get another paintbrush.

Mousetrap (Exidy) While it's true that Mousetrap is overly cute, it offers some clever innovations to the standard maze games. It's a game of cat and mouse—and dog. You're initially a mouse scurrying through a maze. You must avoid cats while searching out delicious pieces of cheese and other bonus items. Eating bones will turn your mouse into a dog for a while and allow you to catch cats—for big bonus points. You can alter the maze at the touch of a button, to block off approaching cats. For added danger, purple hawks appear and fly over the walls looking for a delicious mouse or dog. They don't like the taste of cats. The maze innovations present a great opportunity for strategic play. They seem to eliminate the possibility of repetitive pattern-play, common to most maze games.

Stargate (Williams Electronics) If you've successfully defended your Humanoids against an onslaught of Swarmers and Baiters, then you should challenge yourself to the Yllabian Space Guppies, Space Hums, and Phreds of the new video game "Stargate." The same people who brought you Defender (Williams Electronics) bring you this game Stargate. And it requires the same talents that the original Defender does, especially your Defender Fingers. The strategic complexities and fast-paced action go beyond Defender. The most amazing advance is that, after four attack waves, a whole new confrontation begins: the Yllabian Dog fight. It's fairly safe to say that only those with top Defender skills will ever witness this "space battle unequalled in video history." A new secret weapon is available with Stargate, the Inviso-Anti-Matter Cloaking Device. This, as the name implies, makes you invisible for a period of time. Stargate is not a game for the meek of heart. And it should appeal primarily to the cream-of-the-crop Defender players.

Vanguard (Centuri) Vanguard literally talks you through an exciting multi-leveled video experience. A commanding human voice sounds-off at critical points in the game. Four-directional missiles are at your disposal to fire against enemy forces as you navigate through the first of 12 tunnels to reach an energy zone of temporary safety. Succeeding tunnels increase in difficulty, and point values increase. Unique strategies are required to pass through rocky canyons, the Stick zone, and the Stripe zone with its enemy bases and barriers. The constantly varying threats and the ever-changing strategies—along with your own reflexive talents—make this a popular game world-wide.

Home Video Systems

If you like the arcade games, chances are you've given some thought to the many home systems available. While it's true that home systems are limited in comparison with their sophisticated arcade brethren, they are undoubtedly getting better. And even as they stand, they're some of the best home entertainment available.

Atari has the least-expensive system. It was hot stuff when introduced, although it pales today in light of competitive systems. Two outstanding things work in Atari's favor. First of all, it's cost. You get a lot of entertainment at a bargain-basement price. Second, Atari has developed a knack for obtaining the authorized licenses for popular arcade games. Part of the reason is that Atari manufactures some of those arcade games (Asteroids, Missile Command, Centipede, and Tempest, to name a few). We're not quite sure how they obtained such famous licenses as Pac-Man and Space Invaders. Although the home versions differ—at times drastically—from the arcade versions, the programs are as close as they can successfully make them.

Here are our gripes with the Atari system: (1) There are too many wires connecting too many parts (to the TV, the wall outlet, the joysticks, and the paddles). (2) The TV makes a lot of static when a cartridge is removed. (3) Animation is quite poor. (4) Too many game options are packed into each cartridge, and you must scan through it all to find the one you want to play. (5) Play action is slower than in competitive home systems. Although these problems may be nagging, they're probably worthwhile for budget-tight gamesters. You'll still have a lot of fun with it.

Atari is introducing a new system come summer (1982). The price of the new system will be hefty ($349.95 retail). But the new **Atari Video System X** promises to be worth every cent of it.

The advantages over the present Atari system are clear. The attractive streamline console will require only *one* electrical cord. And a built-in storage area will make for a neat package. All controls will fit snugly into this area when not in use. Other convenient features include a switch on the console, which will enable you to flip back-and-forth from game play to TV viewing.

The revolutionary magic of the Atari System X, however, concerns the games themselves. Sophisticated microprocessors and innovative designs should provide some of the finest graphics and sound in the industry. Game characters and a rainbow of colors will be clearer and sharper than ever before. Sounds will range from "musical notes to shuddering explosions." Atari says, "An innovate chip will eventually give it the ability to reproduce voice and speech."

Atari's new Video System X is classically simple.

At least ten cartridges will be available when the first machine is introduced. These will include Space Invaders, Missile Command, and Asteroids. In addition, some popular arcade favorites will also be available, including Pac-Man, Galaxian, and Defender.

Our advise, therefore, is wait: Wait until you can test the new Atari System X yourself. Our initial reports are quite positive.

Odyssey is the mid-priced home video game system. And it is probably the most unusual system of the bunch. One of the most attractive reasons for going Odyssey are the games themselves. Although they haven't obtained licenses for popular arcade games, they have manufactured some truly exciting original games, like Monkey Shines and Pachinko. Sports games are generally weak, although Volleyball is surprisingly good. UFO and K.C. Munchkin are their best sellers, and for good reasons.

Some Odyssey games come equipped with keyboard overlays and—game boards: you play part of the game on a separate board. The keyboard overlays make it especially easy to use the proper keys. And their keyboard has 49 characters (alphabet and numbers). Quest for the Rings and Conquest of the World are two video/board games.

Odyssey deserves a hard look by anyone interested in video games. The company is obviously going places, and their innovative approach to home video is exciting.

Intellivision (Mattel Electronics, Inc.) has sat proudly at the top of the home video market for quite a spell. They're also the most expensive system. Many of Atari's new System X features were standard in Intellivision. And Intellivision isn't sitting still.

The Intellivision video graphics are the best in the marketplace. Their sports games are legends, and deservedly so. The actions and graphics are simply superb. The reason the Intellivision displays are so exceptional is that they use more space in their cartridges for one game. Remember how Atari put several games on one cartridge. In a sense, Intellivision uses all that computer space for one fascinating game. Each cartridge comes with two overlays for your keyboard controls.

And hold onto your seats. Intellivision will soon be introducing Intellivoice: an attachment for your home system. Believe it or not, expressive male and female voices will become a regular part of your games. These voices will offer tips and advice on your game play. And the tone of the voice will be either calm or panicky, depending on your situation.

Other home video entries include a variety of games by **Coleco, Entex,** and **Bally Astrovision.** Coleco already has a tabletop version of Pac-Man out. It will also be marketing cartridges for other home systems. Entex may surprise us all with their new Entex Arcade System. These systems will be self-contained with their own TV monitors. The first cartridge they promise is Defender.

America's best video gamesters tell all! Learn how to turn their secret strategies into your winning strategies. Stop wasting quarters!

HOW TO WIN AT VIDEO GAMES combines the talents and expertise of over 50 video masters into one book. Never before have so many experts shared so many top secrets. Whether you're a high scorer at **DEFENDER** or a mere novice at **DONKEY KONG**, **HOW TO WIN AT VIDEO GAMES** is the book for you—the one indispensable strategy guide for all the most popular video games.

Now you can rack up scores you never dreamed possible, at every game you try. We'll tell you not only how to play, but how to win—consistently. Every masterful tip has been tested and retested so you can be sure they'll work, every time. And the realistic color illustrations make this the easiest video-game book to understand.

But there's more to **HOW TO WIN AT VIDEO GAMES** than tips and strategies. We also tell you what games are available in home video systems. Did you know home versions of **CENTIPEDE** and tabletop versions of **OMEGA RACE** are in the works? **HOW TO WIN AT VIDEO GAMES** tells you what's new, what's next, and what's coming in the world of video games. And to top it off, you also get personal quotations from the experts and illustrated charts on vital video information.

There's no doubt that **HOW TO WIN AT VIDEO GAMES** gives **you** the competitive edge. Whether you want to beat the machine or simply beat your friends, you won't find a better way to win. Start studying this book today, and you'll quickly become what few dare to dream of: an Arcade Aristocrat. Start winning now!

BEEKMAN HOUSE
Distributed by Crown Publishers, Inc.
One Park Avenue
New York, New York 10016

ISBN: 0-517-381192